

Indiana Department of Environmental Management

We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan Governor

Lori F. Kaplan Commissioner

November 21, 2003

100 North Senate Avenue P.O. Box 6015 Indianapolis, Indiana 46206-6015 (317) 232-8603 (800) 451-6027 www.in.gov/idem

TO: Interested Parties / Applicant

RE: Supior Aluminum Alloys / 003-17183-00286

FROM: Paul Dubenetzky

Chief. Permits Branch Office of Air Quality

Notice of Decision: Approval – Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this permit modification is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, within eighteen (18) days of the mailing of this notice. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- the date the document is delivered to the Office of Environmental Adjudication (OEA); (1)
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3)The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit. decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- the name and address of the person making the request; (1)
- (2) the interest of the person making the request;
- identification of any persons represented by the person making the request; (3)
- the reasons, with particularity, for the request; (4)
- the issues, with particularity, proposed for considerations at any hearing; and (5)
- identification of the terms and conditions which, in the judgment of the person making the request, (6) would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.





Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of a Title V operating permit or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impractible to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency 401 M Street Washington, D.C. 20406

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT



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Indianapolis, Indiana 46206-6015
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November 21, 2003

Mr. Brian Winters Superior Aluminum Alloys P.O. Box 678 New Haven, Indiana 46774

Re: 003-17183-00286

First Significant Permit Modification to: Part 70 permit No.: T003-11452-00286

Dear Mr. Winters:

Superior Aluminum Alloys was issued a Part 70 operating permit on June 24, 2002 for a stationary secondary aluminum production plant. A letter requesting changes to this permit was received on February 5, 2003. Pursuant to the provisions of 326 IAC 2-7-12, a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

This permit modification reclassifies the existing dryer, identified as unit D, as a thermal chip dryer, pursuant to 40 CFR 63.1503, to the following:

One (1) natural gas-fired thermal chip dryer, identified as unit D, constructed in 1998, with a maximum drying capacity of 12,000 pounds of uncoated aluminum chips per hour and a heat input of 6.0 MMBtu/hr, with emissions controlled by fabric filter baghouse D and a 12.0 MMBtu/hr afterburner, and exhausting to stack D.

This reclassification modifies the dryer's allowable emissions pursuant to 40 CFR Part 63 Subpart RRR. Several other conditions of the permit have changed as a result of the reclassification; see the Proposed Changes section of the TSD for the exact changes. Please find attached a copy of the revised permit.

Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Mr. Bob Sidner, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (703) 633-1701 to speak directly to Mr. Sidner. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, press 0 and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Original Signed by Paul Dubenetzky Paul Dubenetzky, Chief Permits Branch Office of Air Quality

Attachments

ERG/BS

cc: File - Allen County

Allen County Health Department

Air Compliance Section Inspector - Jennifer Dorn

Compliance Data Section - Karen Nowak Administrative and Development - Sara Cloe Technical Support and Modeling - Michele Boner

Indiana Department of Environmental Management

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100 North Senate Avenue P. O. Box 6015 Indianapolis, Indiana 46206-6015 (317) 232-8603 (800) 451-6027 www.state.in.us/idem

PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

Superior Aluminum Alloys, L.L.C. 14214 Edgerton Road New Haven, Indiana 46774

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

| Operation Permit No.: T003-11452-00286 | | | | | |
|---|---|--|--|--|--|
| Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality | Issuance Date: June 24, 2002 Expiration Date: June 24, 2007 | | | | |

First Administrative Amendment No.: T003-16496-00286, issued November 27, 2002

| First Significant Permit Modification No. 003-17183-00286 | Pages Affected: 6, 50-57 |
|---|----------------------------------|
| Issued by: Original Signed by Paul Dubenetzky | Issuance Date: November 21, 2003 |
| Paul Dubenetzky, Branch Chief Office of Air Quality | |

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Emergency Occurrence Report
Quarterly Report

Quarterly Deviation and Compliance Monitoring Report

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary, secondary aluminum production plant.

Responsible Official: CEO & President, Superior Aluminum Alloys
Source Address: 14214 Edgerton Road, New Haven, Indiana 46774

Mailing Address: P O Box 678, New Haven, IN 46774

Phone number: (219) 749-7599

SIC Code: 3341 County Location: Allen

Source Location Status: Attainment for all criteria pollutants

Source Status: Part 70 Permit Program

Minor Source, under PSD

Major Source, Section 112 of the Clean Air Act

1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) Four (4) natural gas-fired Reverberatory Furnaces, identified as furnace #1 (constructed in 2002), furnace #2 (constructed in 2001), furnace #3 (constructed in 2000) and furnace #4 (constructed in 2002), each with: a maximum capacity of 28,000 pounds of aluminum scrap per hour, chlorine flux of 10,233 pounds per eight-hour charge, and a heat input capacity of 28 MMBtu/hr, emissions controlled by four (4) fabric filter baghouses with lime injection (baghouses E and F are manually lime injected, baghouses L and N are equipped with continuous lime injection), with furnaces #1 and #2 exhausting to stacks E and F, furnace #3 exhausting to stack L, and furnace #4 exhausting to stack N, respectively.
- (b) One (1) Scrap Shredder, identified as unit C, constructed in 1998, with a maximum capacity of 25,000 pounds aluminum scrap per hour, with emissions controlled by fabric filter baghouse C (exhausting indoors).
- (c) One (1) natural gas-fired Thermal Chip Dryer, identified as unit D, constructed in 1998, with a nominal drying capacity of 12,000 pounds of uncoated aluminum chips per hour and heat input capacity of 6.0 MMBtu/hr, with emissions controlled by fabric filter baghouse D and a 12.0 MMBtu/hr afterburner, and exhausting to stack D.
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

(a) Cleaners and solvents characterized as follows: A) having a vapor pressure equal to or less than 2kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100 degrees F) or; B) having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1 psi measured at 20

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degrees C (68 degrees F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months. [326 IAC 8-3-2]

(b) The following equipment related to manufacturing activities not resulting in the emission of HAPs; brazing equipment cutting torches, soldering equipment, welding equipment. [326 IAC 6-3-2]

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 Applicability).

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SECTION B

GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.3 Enforceability [326 IAC 2-7-7]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]
- (c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit, constitutes a violation of the Clean Air Act and is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; or
 - (3) Denial of a permit renewal application.
- (b) Noncompliance with any provisions of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act.
- (c) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (d) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590 Superior Aluminum Alloys, L.L.C. First Significant Permit Modification No.: 003-17183-00286 Page 11 of 67
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(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.

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(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.12 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,

Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

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- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) In addition to the applicability determinations set forth in Sections D of this permit, the IDEM, OAQ has made the following determinations regarding this source:
 - (1) Condition 11 from CP 003-9243-00286, issued on May 1, 1998 which requires that the Permittee shall record the static pressure drops across the baghouses used in conjunction with the Reverberatory Furnaces #1 and #2, Scrap Dryer and Scrap Shredder once per day.

The static pressure drop across the respective baghouses is required to be recorded once per shift and when venting to the atmosphere, instead of once per

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day, to clarify, reflect, and be consistent with, IDEM guidance regarding monitoring requirements for baghouses.

- (2) Condition D.1.1 from SSM 003-11927-00286, issued June 7, 2000 which states that:
 - (A) The NOx emissions from reverberatory furnace #3 charging and melting shall not exceed 3.50 pounds per hour.
 - (B) The NOx emissions from reverberatory furnace #4 charging and melting shall not exceed 3.50 pounds per hour.
 - (C) The NOx emissions from the rotary furnace M shall not exceed 1.5 pounds per hour.

IDEM has determined that the NO_x limits were based on inappropriate emission factors which were consequently used to produced PSD Minor limits in SSM 003-11927-00286 that do not sufficiently limit the source to below PSD threshold levels. As a result, these limits are not included in this Part 70 permit. This Title V Part 70 permit includes an aggregate scrap aluminum feed/charge limit for the four reverberatory furnaces to limit the source's NOx emissions to less than PSD significance levels. See State Rule Applicability - Entire Source of this TSD for more information.

- (3) Condition D.1.1 from SSM 003-11927-00286, issued June 7, 2000 states that:
 - (A) The PM emissions from baghouses E, F, and L (controlling furnaces #1, #2, and #3) combined shall not exceed 2.408 pounds per hour.
 - (B) The PM10 emissions from baghouses E, F and L (controlling furnaces #1, #2, and #3) combined shall not exceed 2.408 pounds per hour.
 - (C) The PM emissions from baghouse N (controlling reverberatory furnace #4 and rotary furnace M) shall not exceed 1.204 pounds per hour.
 - (D) The PM10 emissions from baghouse N (controlling reverberatory furnace #4 and rotary furnace M) shall not exceed 1.204 pounds per hour.

IDEM has converted these PM and PM10 emission limits on a pound per hour basis to limits on a pound per ton aluminum produced basis to be consistent with the limited aluminum production rate included in this permit.

- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit

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application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

- (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(7)]

B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015 Superior Aluminum Alloys, L.L.C. First Significant Permit Modification No.: 003-17183-00286 Page 16 of 67 New Haven, Indiana Modified by: ERG/BS TV: 003-11452-00286

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using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-4]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

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- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
 - (2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3] If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)] If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

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(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act:
 - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
 - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

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Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
 - (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]

 The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]

 The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

B.21 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy any records that must be kept under the conditions of this permit;
- (c) Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

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(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

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B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

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SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

<u>C.4</u> Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit(s) vented to the control equipment is (are) in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

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C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) Procedures for Asbestos Emission Control
 The Permittee shall comply with the applicable emission control procedures in 326 IAC 1410-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4, emission control requirements are
 applicable for any removal or disturbance of RACM greater than three (3) linear feet on
 pipes or three (3) square feet on any other facility components or a total of at least 0.75
 cubic feet on all facility components.
- (f) Indiana Accredited Asbestos Inspector
 The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator,
 prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to
 thoroughly inspect the affected portion of the facility for the presence of asbestos. The
 requirement that the inspector be accredited, pursuant to the provisions of 40 CFR 61,
 Subpart M, is federally enforceable.

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Testing Requirements [326 IAC 2-7-6(1)]

C.9 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

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The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.
- (b) Whenever a condition in this permit requires the measurement of a temperature or flow rate the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.
- (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

within ninety (90) days after the date of issuance of this permit.

The ERP does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

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(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP);

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- C.16 Compliance Response Plan Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]
 - (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
 - (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the

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applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

- (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
 - (1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

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- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

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SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Furnaces

(a) Four (4) natural gas-fired Reverberatory Furnaces, identified as furnace #1 (constructed in 2002), furnace #2 (constructed in 2001), furnace #3 (constructed in 2000) and furnace #4 (constructed in 2002), each with: a maximum capacity of 28,000 pounds of aluminum scrap per hour, chlorine flux of 10,233 pounds per eight-hour charge, and a heat input capacity of 28 MMBtu/hr, emissions controlled by four (4) fabric filter baghouses with lime injection (baghouses E and F are manually lime injected, baghouses L and N are equipped with continuous lime injection), with furnaces #1 and #2 exhausting to stacks E and F, furnace #3 exhausting to stack L, and furnace #4 exhausting to stack N, respectively.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2] [40 CFR 52.21]

The following conditions apply to Reverberatory Furnaces #1 through #4.

- (a) The combined input of aluminum scrap to reverberatory furnaces #1, #2, #3, and #4 shall not exceed 300,000,000 pounds per twelve consecutive month period. This aluminum feed/charge limit, in combination with the unlimited NO_x emissions from the Scrap Dryer, and Melt Pots, will effectively limit the source's potential to emit nitrogen oxides (NO_x) to less than 100 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) NO_x emissions from each of the reverberatory furnaces #1, #2, #3, and #4 shall not exceed 0.25 pounds per ton of aluminum charged and 0.01 pounds per ton of aluminum poured/cast.
- (c) The amount of flux used in each furnace shall be limited to 11,205,135 pounds per twelve consecutive month period with compliance determined at the end of each month.
- (d) The PM emissions from each furnace (Reverberatory Furnaces #1 through #4) shall not exceed 0.1 pounds per ton aluminum melted.
- (e) The PM10 emissions from each furnace (Reverberatory Furnaces #1 through #4) shall not exceed 0.1 pounds per ton aluminum melted.

Compliance with these limits render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.1.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to reverberatory furnaces #1, #2, #3, and #4 except when otherwise specified in 40 CFR Part 63, Subpart RRR.

D.1.3 Secondary Aluminum Smelting Limits [40 CFR Part 63.1500 (Subpart RRR)]

Pursuant to 40 CFR Part 63.1505, the following conditions shall apply to the reverberatory furnaces #1, #2, #3, and #4.

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- (a) The Permittee shall be in compliance with the following emission limitations and operating requirements upon startup:
 - (1) The Permittee shall not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of PM in excess of:

$$L_{cPM}$$
 ? $\frac{?}{?} ? L_{iPM} x T_i$? $\frac{?}{?} T_{ii}$

where L_{iPM} = The PM emission limit for individual emission unit in the secondary aluminum processing unit I in paragraph (i)(1) and (2) of 40 CFR 63.1505. T_{ti} = The feed/charge rate for individual emission unit I; and L_{cPM} = The PM emission limit for secondary aluminum processing unit I.

The PM emission limit (L_{cPM}) for a Group 1 furnace without an in-line fluxer (each reverberatory furnace) at a secondary aluminum production facility shall be 0.40 pounds per ton of feed/charge or per ton of aluminum produced. [40 CFR 63.1505(i)][40 CFR 63.1505(k)]

(2) The Permittee shall not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of HCl in excess of:

$$L_{cHCl}$$
 ? $\frac{?}{?} ? L_{iiHcl} x T_{ii}$? $\frac{!}{?} T_{ii}$

where L_{iiHCl} = The HCl emission limit for individual emission unit in the secondary aluminum processing unit I in paragraph (i)(4) of 40 CFR 63.1505.

 T_{ti} = The feed/charge rate for individual emission unit I; and

L_{cHCI} = The HCl emission limit for secondary aluminum processing unit I.

The HCl emission limit (L_{cHCl}) for a Group 1 furnace without an in-line fluxer (each reverberatory furnace) at a secondary aluminum production facility shall be 0.40 pounds per ton of feed/charge or per ton of aluminum produced. [40 CFR 63.1505(i)][40 CFR 63.1505(k)]

(3) The Permittee shall not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of total tetra-, penta-, hexa-, and octachlorinated dibenzo dioxins and furans (D/F) in excess of:

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$$L_{cDF} ? rac{\displaystyle \mathop{?}^{n}}{\displaystyle \mathop{?}_{i?l}} L_{iiDE} x T_{ii}? }{\displaystyle \mathop{?}^{n}}_{i?l} T_{ii}}$$

where

 L_{tiDF} = The D/F emission limit for individual emission unit in the secondary aluminum processing unit; and

 L_{cDF} = The D/F emission limit for secondary aluminum processing unit.

The D/F emission limit (L_{cDF}) for a Group 1 furnace without an in-line fluxer (Reverberatory Furnaces #1 through #4) at a secondary aluminum production facility shall be 15 micrograms of D/F TEQ per megagram (2.1 x 10^{-4} gr of D/F TEQ per ton) of feed/charge. Where TEQ is the toxicity equivalents for dioxins and furans as defined in 40 CFR 60.2125 (July 2001) [40 CFR 63.1505(i)][40 CFR 63.1505(k)]

(b) Identification, emission limits and means of compliance shall be posted on the reverberatory furnaces #1, #2, #3, #4.

D.1.4 Labeling [40 CFR Part 63.1506(b)]

The owner or operator shall provide and maintain easily visible labels that shall be posted at the furnaces. Said labels shall identify the applicable emission limits and means of compliance, including:

- (a) the type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, in-line fluxer); and
- (b) the applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

D.1.5 Capture and Control Systems [40 CFR Part 63.1506(c)]

Pursuant to 40 CFR 63.1506(c), the owner or operator of the furnaces must:

- (a) Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Manual of Recommended Practice" (incorporated by reference: 40 CFR 63.1502)
- (b) Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and
- (c) Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

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D.1.6 Operation, Maintenance, and Monitoring (OM&M) Plan [63.1510(b)]

The owner or operator must prepare and implement for each furnace, a written operation, maintenance, and monitoring (OM&M) plan. The owner or operator must submit the plan to the applicable permitting authority within 90 days after a successful initial performance test under 40 CFR 63.1511(b). Any subsequent changes to the plan must be submitted to the applicable permitting authority for review and approval. Pending approval by the applicable permitting authority of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. Each plan must contain the following information:

- (a) Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
- (b) A monitoring schedule for each affected source and emission unit.
- (c) Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in §63.1505.
- (d) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
 - (1) Calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
 - (2) Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in subpart A of this part.
- (e) Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
- (f) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in 40 CFR 63.1510(b)(1), including:
 - (1) Procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
 - (2) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- (g) A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

D.1.7 Particulate [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from each reverberatory furnace shall not exceed 24.0 pounds per hour when operating at a process weight rate of 14.0 tons of per hour.

The pounds per hour limitations were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

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 $E = 4.10 P^{0.67}$ where E =rate of emission in pounds per hour; and P =process weight rate in tons per hour

D.1.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their baghouses. If the OM&M plan required by condition D.1.6 is developed in accordance with Section B- Preventive Maintenance Plans, then after the OM&M plan has been approved, it shall satisfy the requirements of this condition.

Compliance Determination Requirements

D.1.9 Testing Requirements [326 IAC 2-7-6(1),(6)] [40 CFR 63 Subpart RRR]

- (a) In order to demonstrate compliance with 40 CFR Part 63 Subpart RRR, 40 CFR 52.21, and 326 IAC 2-2, the Permittee shall, within 90 days after startup, perform PM and PM10 testing on baghouses E, F, and N, and NO_x, HCl, and D/F testing on reverberatory furnaces #1, #2, and #4, using methods as approved by the Commissioner, in accordance with the requirements in 40 CFR 63, Subpart A and 40 CFR 63, Subpart RRR. When testing baghouses E and F,reverberatory furnaces #1 and #2 shall be operated at 95% or more of their maximum design capacities. When testing baghouse N, reverberatory furnace #4 shall be operated at 95% or more of its maximum design capacity. PM10 includes filterable and condensible PM10. Testing shall be conducted in accordance with Section C- Performance Testing. These tests shall be repeated every two and one-half (2.5) years.
- (b) The Permittee shall establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 40 CFR 63.1510 that ensures compliance with the applicable emission limit for D/F. The Permittee may use existing data in addition to the results of the performance test to establish operating parameter values for compliance monitoring provided the requirements of 40 CFR 63.1511(g) are met [63.1511(g)].

D.1.10 Particulate Matter (PM) and Capture/Collection Systems [40 CFR 63.1506(c)]

Pursuant to CP-003-9243-00286, issued on May 1, 1998, Source Modification 003-11927-00286, issued on June 7, 2000, and in order to comply with Conditions D.1.1, D.1.3, D.1.5, and D.1.7, the capture/control system (baghouses) for PM control shall be in operation and control emissions from the furnaces at all times that the furnaces are in operation according to the procedures and requirements of the OM&M plan. Baghouse L for PM control shall be in operation and control emissions from furnace #3 at all times when furnace #3 is in operation. Baghouse N for PM control shall be in operation and control emissions from furnace #4 at all times when furnace #4 is in operation. It is acceptable to operate only one of the baghouses E or F if only one of the two reverberatory furnaces #1 and #2 is operating. If both reverberatory furnaces #1 and #2 are operating, then both baghouses E and F must be operated.

D.1.11 Feed/Charge Determination [40 CFR 63.1506(d)]

Pursuant to 40 CFR 63.1506, the Permittee shall install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test. The Permittee shall operate each measurement system or other weight determination procedure in accordance with the Operation, Maintenance, and Monitoring Plan. Alternatively, the Permittee may choose to measure and record aluminum production weight from an affected emission unit rather than feed/charge weight provided that the aluminum production weight is measured for all emission units within a secondary aluminum processing unit and all calculations to demonstrate compliance with the emission limits for secondary aluminum processing units are based on aluminum production weight rather than feed/charge weight.

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D.1.12 Secondary Aluminum Smelting Compliance Determination [40 CFR Part 63, Subpart RRR]

Pursuant to 40 CFR Part 63.1510, the following conditions shall apply to reverberatory furnaces #1, #2, #3, and #4:

- (a) For each furnace, the Permittee shall [63.1506(m)]:
 - (1) Initiate corrective action within one (1) hour of a bag leak detection system alarm; complete the corrective action procedures in accordance with the Operation, Maintenance, and Monitoring Plan; and operate each fabric filter system such that the bag leak detection system alarm does not sound more than five (5) percent of the operating time during a six (6) month reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the Permittee takes longer than one (1) hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the Permittee to initiate corrective action.
 - (2) Maintain the three (3) hour average inlet temperature for each fabric filter at or below the average temperature established during the performance test plus 25 degrees F.
 - (3) For a continuous-lime injection system, the Permittee shall maintain free-flowing alkaline agent in the hopper to the feed device at all times and maintain the alkaline agent feeder setting at the same level established during the performance test. For the purposes of this rule lime means calcium oxide or other alkaline reagent; and lime-injection means the continuous addition of lime upstream of the fabric filter.
 - (4) Maintain the total reactive flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.
- (b) The Permittee shall use a continuous lime-injected fabric filter to comply with the requirements of 40 CFR 63, Subpart RRR; and therefore must [40 CFR 63.1510(i)]:
 - (1) Verify that the lime (or other alkaline agent) is always free-flowing by: Inspecting the feed hopper or silo at least once each eight (8) hour period and recording the results of each inspection. If the lime or other alkaline agent is found not to be free-flowing during any of the eight (8) hour periods, the Permittee shall increase the frequency of inspections to at least once every four (4) hour period for the next three (3) days. The Permittee may return to inspections at least once every eight (8) hour period if corrective action results in no further blockages of lime or other alkaline agent during the three (3) day period.
 - (2) The Permittee shall also record the feeder setting once each day of operation.
- (c) Pursuant to 40 CFR 63.1510(j), for all furnaces at this source, the Permittee shall [40 CFR 63.1510(j)]:
 - (1) Install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or reactive liquid flux injected into each furnace. The monitoring system must record the weight for each fifteen (15) minute period,

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during which reactive fluxing occurs, over the same operating cycle or time period used in the performance test. The accuracy of the weight measurement shall be within one (1) percent of the weight of the reactive component of the flux being measured. The Permittee may apply to IDEM, OAQ to use a weight measurement device of alternative accuracy in cases where the reactive flux flow rates are so low as to make the use of a weight measurement device of within one (1) percent accuracy impracticable. The Permittee shall verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every six (6) months.

- (2) Calculate and record the flux injection rate (kg/Mg or lb/ton) for each operating cycle or time period used in the performance test using the procedure in 40 CFR 63.1512(o).
- (3) Record, for each fifteen (15) minute time period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of reactive flux.
- (4) Calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test.
- (d) An owner or operator of a secondary aluminum processing unit at a facility must include, within the OM&M plan prepared in accordance with 40 CFR 63.1510(b), the following information [40 CFR 63.1510(s)(1)]:
 - (1) The identification of each emission unit in the secondary aluminum processing unit;
 - (2) The specific control technology of pollution prevention measure to be used for each emission unit in the secondary aluminum processing unit and the date of its installation or application;
 - (3) The emission limit calculated for each secondary aluminum processing unit and performance test result with supporting calculations demonstrating initial compliance with each applicable emission limit;
 - (4) Information and data demonstrating compliance for each emission unit with all applicable design equipment work practice or operational standards of Subpart RRR; and
 - (5) The monitoring requirements applicable to each emission unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average using the procedure in 40 CFR 63.1510(t).
- (e) The SAPU compliance procedures within the OM&M plan may not contain any of the information provided in 40 CFR 63.1510(s)(2)(i) through (iv). [40 CFR 63.1510(s)(2)]

The completion of the initial performance tests for the secondary aluminum processing units shall be considered to be the date of approval of the Operation, Maintenance and Monitoring Plan by IDEM, OAQ [63.1506(a)(2)].

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The owner or operator shall, for each furnace, inspect the labels required in Condition D.1.4 at least once per calendar month to confirm that the posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.

D.1.14 Capture/Collection System [63.1510(d)]

The owner or operator shall, for the furnaces, inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in 40 CFR 63.1506(c) and record the results of each inspection.

D.1.15 Feed/Charge Determination [40 CFR 63.1510(e)]

The owner or operator of the furnaces must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from each furnace emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. The accuracy of the weight measurement device or procedure must be ± 1 percent of the weight being measured.

D.1.16 Fabric Filter Monitoring Requirements [40 CFR 63.1510(f)]

These requirements apply to the owner or operator of each reverberatory furnace listed in this section.

- (a) The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.
- (b) Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997).
- (c) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
- (d) The bag leak detection system sensor must provide output of relative or absolute PM loadings.
- (e) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
- (f) The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.
- (g) For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.
- (h) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
- (i) The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
- (j) Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment

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follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.

D.1.17 Fabric Filter Inlet Temperature Monitoring Requirements [40 CFR 63.1510(h)]

- (a) The owner or operator must install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases entering baghouses E, F, L and N consistent with the requirements for continuous monitoring systems in 40 CFR Part 63, Subpart A.
- (b) The temperature monitoring device must meet each of these performance and equipment specifications:
 - (1) The monitoring system must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period.
 - (2) The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).
 - (3) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.

D.1.18 Corrective Action [40 CFR 63.1506(p)]

When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established and incorporated in the OM&M plan, the owner or operator shall initiate corrective action. The corrective action taken, shall restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

In addition, the corrective actions taken shall include follow-up actions necessary to return the process or control device parameter level(s) to the applicable value or range of values, and steps to prevent the likely recurrence of the cause of a deviation.

D.1.19 Compliance Monitoring Requirements [40 CFR 63.1510(t)] [40 CFR 63.1510(u)]

Pursuant to 40 CFR 63, Subpart RRR, on or after the date of the initial performance test is required to be completed, the Permittee shall monitor all emission units and control equipment according to the following requirements [63.1510(a)]:

- (a) The Permittee shall calculate and record the 3-day, 24- hour rolling average emissions of PM, HCl, and D/F for each furnace on a daily basis. To calculate the 3-day, 24-hour rolling average, the Permittee shall:
 - (1) Calculate and record the total weight of material charged to each furnace for each 24-hour day of operation using the feed/charge weight data collected as required under Subpart RRR.
 - (2) To provide emissions for each furnace for the 24-hour period, in pounds: multiply the total feed/charge weight to the furnace or the weight of aluminum produced by the furnace for the 24-hour period, by the emission rate (in lb/ton of feed/charge) for that furnace (as determined during the emission test).
 - (3) Calculate and record the 3-day, 24-hour rolling average for each pollutant each day by summing the daily emission rates for each pollutant over the 3 most recent consecutive days and dividing by 3.

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(b) As an alternative to the procedures in (a)(1) above, the Permittee may demonstrate through performance tests, that each individual furnace is in compliance with the applicable emission limit [40 CFR 63.1510(u)].

D.1.20 Parametric Monitoring

The Permittee shall record the total static pressure drop across baghouses E, F, L, and N, used in conjunction with the furnaces, at least once per shift when any of the furnaces are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.21 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the furnaces when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.1.22 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.23 Record Keeping Requirements

(a) To document compliance with D.1.1, the Permittee shall maintain records of the total scrap aluminum and flux charged to each reverberatory furnace for each 12 consecutive month period.

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(b) To document compliance with Condition D.1.20, the Permittee shall maintain records of the inlet and outlet differential static pressure once per shift during normal operation when venting to the atmosphere

- (c) To document compliance with Condition D.1.21, the Permittee shall maintain records of the results of the inspections required under Condition D.1.21.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

D.1.24 Secondary Aluminum Production Record Keeping Requirements [40 CFR Part 63, Subpart RRR] Pursuant to 40 CFR Part 63.1517 the owner or operator shall:

- (a) As required by 40 CFR 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and Subpart RRR.
- (b) The owner or operator must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.
- (c) The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.
- (d) In addition to the general records required by 40 CFR 63.1510(b), the owner or operator of a furnace with a lime-injected fabric filter must maintain records of:
 - (1) The number of total operating hours for the affected source or emission unit during each 6-month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action(s) taken.
 - (2) The following regarding lime injection:

Records of inspections at least once every 8-hour period verifying that lime is present in the feeder hopper or silo and flowing, including any inspection where blockage is found, with a brief explanation of the cause of the blockage and the corrective action taken, and records of inspections at least once every 4-hour period for the subsequent 3 days. If flow monitors, pressure drop sensors or load cells are used to verify that lime is present in the hopper and flowing, records of all monitor or sensor output including any event where blockage was found, with a brief explanation of the cause of the blockage and the corrective action taken;

- (3) For each group 1 furnace at this source, records of 15-minute block average weights of gaseous or liquid reactive flux injection, total reactive flux injection rate and calculations (including records of the identity, composition, and weight of each addition of gaseous, liquid or solid reactive flux), including records of any period the rate exceeds the compliant operating parameter value and corrective action taken.
- (4) For each continuous monitoring system, records required by 40 CFR 63.10(c).

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- (5) For each furnace, weights for each operating cycle or time period used in the performance test.
- (6) Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.
- (7) Records of annual inspections of emission capture/collection and closed vent systems.
- (8) Records for any approved alternative monitoring or test procedure.
- (9) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:
 - (i) Startup, shutdown, and malfunction plan;
 - (ii) For major sources, OM&M plan; and
 - (iii) Site-specific secondary aluminum processing unit emission plan.
- (10) For each furnace, records of total charge weight for each 24-hour period and calculations of 3-day, 24-hour rolling average emissions.

D.1.25 Secondary Aluminum Production Reporting Requirements [40 CFR Part 63, Subpart RRR] Pursuant to 40 CFR 63.1510 and 63.1516 the owner or operator shall:

- (a) Submit initial notifications, upon startup, to the applicable permitting authority as described below.
 - (1) The owner or operator must provide notification of the anticipated date for conducting performance tests and visible emission observations. The owner or operator must notify the Administrator of the intent to conduct a performance test at least 60 days before the performance test is scheduled; notification of opacity or visible emission observations for a performance test must be provided at least 30 days before the observations are scheduled to take place.
 - (2) The owner or operator must provide additional notifications for sources with continuous emission monitoring systems.
- (b) Each owner or operator must submit a notification of compliance status report within 60 days after the compliance dates specified in 40 CFR 63.1501. The notification must be signed by the responsible official who must certify its accuracy. A complete notification of compliance status report must include the information specified in paragraphs (a)(1) through (10) of this section. The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination. In a State with an approved operating permit program where delegation of authority under section 112(I) of the CAA has not been requested or approved, the owner or operator must provide duplicate notification to the applicable Regional Administrator. If an owner or operator submits the information specified in this section at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report must include:

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- (1) All information required in 40 CFR 63.9(h). The owner or operator must provide a complete performance test report for each affected source and emission unit for which a performance test is required. A complete performance test report includes all data, associated measurements, and calculations (including visible emission and opacity tests).
- (2) The approved site-specific test plan and performance evaluation test results for each continuous monitoring system.
- (3) Unit labeling as described in 40 CFR 63.1506(b), including process type or furnace classification and operating requirements.
- (4) The compliant operating parameter value or range established for each affected source or emission unit with supporting documentation and a description of the procedure used to establish the value (e.g., lime injection rate, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature), including the operating cycle or time period used in the performance test.
- (5) Design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in 40 CFR 63.1506(c).
- (6) If applicable, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in 40 CFR 63.1510(f).
- (7) Approved OM&M plan.
- (8) Startup, shutdown, and malfunction plan, with revisions.
- (c) The owner or operator must develop and implement a written plan that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include:
 - (1) Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
 - (2) Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.
- (d) The owner or operator must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in 40 CFR 63.10(c). When no deviations of parameters have occurred, the owner or operator must submit a report stating that no excess emissions occurred during the reporting period.

A report must be submitted if any of these conditions occur during a 6-month reporting period:

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- (1) The corrective action specified in the OM&M plan for a bag leak detection system alarm was not initiated within 1 hour.
- (2) An excursion of a compliant process or operating parameter value or range (e.g., lime injection rate or screw feeder setting, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter).
- (3) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).
- (4) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of Subpart RRR.
- (5) A deviation from the 3-day, 24-hour rolling average emission limit for a secondary aluminum processing unit.
- (e) The owner or operator must submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested.
- (f) For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:
 - (1) Any period of excess emissions, as defined the semiannual report, that occurred during the year were reported as required by this subpart; and
 - (2) All monitoring, Record keeping, and reporting requirements were met during the year.

D.1.26 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Scrap Shredder

(b) One (1) Scrap Shredder, identified as unit C, constructed in 1998, with a maximum capacity of 25,000 pounds aluminum scrap per hour, with emissions controlled by fabric filter baghouse C (exhausting indoors).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

Pursuant to CP 003-9243-00286, issued on May 1, 1998, and in order to render the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable, particulate matter (PM) and PM10 emissions shall not exceed the allowable emission rate of 0.338 pounds per hour.

D.2.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the shredder except when otherwise specified in 40 CFR Part 63, Subpart RRR.

D.2.3 Secondary Aluminum Production Limits [40 CFR Part 63, Subpart RRR]

Pursuant to 40 CFR 63.1505, the owner or operator of a Scrap Shredder shall not discharge or cause to be discharged to the atmosphere PM emissions in excess of 0.01 grains per dry standard cubic foot (gr/dscf).

The Permittee shall be in compliance with the emission limitations and operating requirements by March 24, 2003.

D.2.4 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to CP 003-9243-00286, issued on May 1, 1998, and 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) emissions from the baghouse controlling the shredder shall not exceed 22.27 pounds per hour when operating at a process weight rate of 12.5 tons of metal per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.2.5 Labeling [40 CFR Part 63.1506(b)]

The owner or operator shall provide and maintain easily visible labels that shall be posted at the Scrap Shredder. Said labels shall identify the applicable emission limits and means of compliance, including:

(a) the type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, in-line fluxer); and

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(b) the applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

D.2.6 Capture and Control Systems [40 CFR Part 63.1506(c)]

Pursuant to 40 CFR 63.1506(c), the owner or operator of the Scrap Shredder must:

- (a) Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Manual of Recommended Practice" (incorporated by reference: 40 CFR 63.1502)
- (b) Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and
- (c) Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

D.2.7 Operation, Maintenance, and Monitoring (OM&M) Plan [63.1510(b)]

The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. The owner or operator must submit the plan to the applicable permitting authority no later than the compliance date established in 40 CFR 63.1501(a). Any subsequent changes to the plan must be submitted to the applicable permitting authority for review and approval. Pending approval by the applicable permitting authority of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. Each plan must contain the following information:

- (a) Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
- (b) A monitoring schedule for each affected source and emission unit.
- (c) Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in §63.1505.
- (d) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
 - (1) Calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
 - (2) Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in subpart A of this part.
- (e) Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.

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(f) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in paragraph (b)(1) of this section, including:

- (1) Procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
- (2) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- (g) A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

D.2.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its baghouse. If the OM&M plan required by condition D.2.7 is developed in accordance with Section B- Preventive Maintenance Plans, then after the OM&M plan has been approved, it shall satisfy the requirements of this condition.

Compliance Determination Requirements

D.2.9 Particulate Matter (PM) and Capture/Collection Systems [40 CFR 63.1506(c)]

Pursuant to CP-003-9243-00286, issued on May 1, 1998, 40 CFR 63.1506(c), and in order to comply with Conditions D.2.1, D.2.3, and D.2.4, the capture/control system (baghouse) for PM control shall be in operation and control emissions from the Scrap Shredder at all times that the shredder is in operation according to the procedures and requirements of the OM&M plan.

D.2.10 Secondary Aluminum Compliance Determination [40 CFR Part 63, Subpart RRR]

Pursuant to 40 CFR Part 63.1506(e), the owner operator of a scrap shredder with emissions controlled by a fabric filter must operate a bag leak detection system. Therefore, the owner or operator must:

- (a) Initiate corrective action within 1-hour of a bag leak detection system alarm and complete the corrective action procedures in accordance with the OM&M plan.
- (b) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.11 Labeling [40 CFR 63.1510(c)]

The owner or operator shall, for the Scrap Shredder, inspect the labels required in Condition D.2.5 at least once per calendar month to confirm that the posted labels are intact and legible.

D.2.12 Capture/Collection System [63.1510(d)(2)]

The owner or operator shall, for the Scrap Shredder, inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in Condition D.2.6 and record the results of each inspection.

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D.2.13 Monitoring Requirements [40 CFR 63.1510(f)]

(a) These requirements apply to the owner or operator of the scrap shredder:

- (1) The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.
- (2) Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.
- (3) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
- (4) The bag leak detection system sensor must provide output of relative or absolute PM loadings.
- (5) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
- (6) The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.
- (7) For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.
- (8) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
- (9) The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
- (10) Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.

D.2.14 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the scrap shredder at least once per shift when the shredder is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

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The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

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D.2.15 Baghouse Inspections

An inspection shall be performed each calender quarter of the bags controlling the shredder when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.2.16 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.2.17 Corrective Action [40 CFR 63.1506(p)]

When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established and incorporated in the OM&M plan, the owner or operator shall initiate corrective action. The corrective action taken, shall restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

In addition, the corrective actions taken shall include follow-up actions necessary to return the process or control device parameter level(s) to the applicable value or range of values, and steps to prevent the likely recurrence of the cause of a deviation.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.18 Record Keeping Requirements

- To document compliance with Condition D.2.14, the Permittee shall maintain records of the inlet and outlet differential static pressure once per shift during normal operation when venting to the atmosphere.
- (b) To document compliance with Condition D.2.15, the Permittee shall maintain records of the results of the inspections required under Condition D.2.15 and the dates the vents are redirected.

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(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.19 Secondary Aluminum Production Record Keeping Requirements [40 CFR Part 63, Subpart RRR] Pursuant to 40 CFR Part 63.1517 the owner or operator shall:

- (a) As required by 40 CFR 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and Subpart RRR.
- (b) The owner or operator must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.
- (c) The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.
- (d) In addition to the general records required by 40 CFR 63.1510(b), the owner or operator of a scrap shredder with emissions controlled by a baghouse must maintain records of:
 - (1) The number of total operating hours for the affected source or emission unit during each 6-month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action(s) taken.
 - (2) Records required by 40 CFR 63.10(c) for each continuous monitoring system.
 - (3) Feed/charge (or throughput) weights for each operating cycle or time period used in the performance test.
 - (4) Monthly inspections for proper unit labeling subject to labeling requirements.
 - (5) Annual inspections of emission capture/collection and closed vent systems.
 - (6) Any approved alternative monitoring or test procedure.
 - (7) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:
 - (i) Startup, shutdown, and malfunction plan;
 - (ii) For major sources, OM&M plan; and
 - (iii) Site-specific secondary aluminum processing unit emission plan (if applicable).

D.2.20 Secondary Aluminum Production Reporting Requirements [40 CFR Part 63, Subpart RRR] Pursuant to 40 CFR 63.1510 and 63.1516 the owner or operator shall:

- (a) Submit initial notifications to the applicable permitting authority as described below.
 - (1) The owner or operator must provide notification of the anticipated date for conducting performance tests and visible emission observations. The owner or

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operator must notify the Administrator of the intent to conduct a performance test at least 60 days before the performance test is scheduled; notification of opacity or visible emission observations for a performance test must be provided at least 30 days before the observations are scheduled to take place.

- (2) The owner or operator must provide additional notifications for sources with continuous emission monitoring systems or continuous opacity monitoring systems.
- (b) Each owner or operator must submit a notification of compliance status report within 60 days after the compliance dates specified in 40 CFR 63.1501. The notification must be signed by the responsible official who must certify its accuracy. A complete notification of compliance status report must include the information specified in paragraphs (a)(1) through (10) of this section.
 - (1) All information required in 40 CFR 63.9(h). The owner or operator must provide a complete performance test report for each affected source and emission unit for which a performance test is required. A complete performance test report includes all data, associated measurements, and calculations (including visible emission and opacity tests).
 - (2) The approved site-specific test plan and performance evaluation test results for each continuous monitoring system (including a continuous emission or opacity monitoring system).
 - (3) Unit labeling as described in 40 CFR 63.1506(b), including process type or furnace classification and operating requirements.
 - (4) Design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in §63.1506(c).
 - (5) If applicable, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in 40 CFR 63.1510(f).
 - (6) Startup, shutdown, and malfunction plan, with revisions.
- (c) The owner or operator must develop and implement a written plan that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include:
 - (1) Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
 - (2) Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.
- (d) The owner or operator must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in 40 CFR 63.10(c).

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When no deviations of parameters have occurred, the owner or operator must submit a report stating that no excess emissions occurred during the reporting period.

A report must be submitted if any of these conditions occur during a 6-month reporting period:

- (1) The corrective action specified in the OM&M plan for a bag leak detection system alarm was not initiated within 1 hour.
- (2) An excursion of a compliant process or operating parameter value or range (e.g., lime injection rate or screw feeder setting, or other approved operating parameter).
- An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).
- (4) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of Subpart RRR.
- (e) For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:
 - (1) Any period of excess emissions, as defined the semiannual report, that occurred during the year were reported as required by this subpart; and
 - (2) All monitoring, record keeping, and reporting requirements were met during the year.

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SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Scrap Dryer

(c) One (1) natural gas-fired Thermal Chip Dryer, identified as unit D, constructed in 1998, with a nominal drying capacity of 12,000 pounds of uncoated aluminum chips per hour and heat input capacity of 6.0 MMBtu/hr, with emissions controlled by fabric filter baghouse D and a 12.0 MMBtu/hr afterburner, and exhausting to stack D.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2] [40 CFR 52.21]

Pursuant to CP 003-9243-00286, issued on May 1, 1998, and in order to render the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable, the particulate matter (PM) and PM10 emissions from the thermal chip dryer shall not exceed the allowable emission rate of 4.188 pounds per hour. This limitation is equivalent to PM/PM10 emissions of less than or equal to 18.34 tons per year.

D.3.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the thermal chip dryer except when otherwise specified in 40 CFR Part 60, Subpart RRR.

D.3.3 Secondary Aluminum Production Limits [40 CFR Part 63.1505(c)] [40 CFR Part 63.1506]

The scrap dryer is subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 40 CFR Part 63 Subpart RRR. The owner or operator of a thermal chip dryer must not discharge or cause to be discharged to the atmosphere emissions in excess of:

- (1) 2.5 micrograms total polychlorinated dibenzofurans (D/F) international Toxicity Equivalent (TEQ) per megagram (3.5 x10⁻⁵ gr per ton) of feed/charge.
- (2) 0.8 pounds THC (Total Hydrocarbon), as propane, per ton of feed/charge.

The Permittee shall be in compliance with the emission limitations and operating requirements by March 24, 2003.

D.3.4 Feed/Charge Determination [40 CFR 63.1506(d)]

The Permittee shall install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test. The Permittee shall operate each measurement system or other weight determination procedure in accordance with the Operation, Maintenance, and Monitoring Plan. Alternatively, the Permittee may choose to measure and record aluminum production weight from an affected emission unit rather than feed/charge weight provided that the aluminum production weight is measured for all emission units within a secondary aluminum processing unit and all calculations to demonstrate compliance with the emission limits for secondary aluminum processing units are based on aluminum production weight rather than feed/charge weight.

D.3.5 Capture and Control Systems [40 CFR 63.1506(c)][40 CFR 63.1510(d)]

Pursuant to 40 CFR 63.1506(c), the owner or operator of thermal chip dryer must:

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- (a) Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Manual of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart)
- (b) Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and
- (c) Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

D.3.6 Operation, Maintenance, and Monitoring (OM&M) Plan [40 CFR 63.1510(b)]

The owner or operator must implement for the thermal chip dryer, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the applicable permitting authority for review and approval. Pending approval by the applicable permitting authority of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. Each plan must contain the following information:

- (a) Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
- (b) A monitoring schedule for the dryer.
- (c) Procedures for the proper operation and maintenance of the dryer and each add-on control device used to meet the applicable emission limits or standards in 40 CFR 63.1505.
- (d) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
 - (1) Calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
 - (2) Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in subpart A of this part.
- (e) Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
- (f) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in paragraph (b)(1) of this section, including:
 - (1) Procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
 - (2) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- (g) A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

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BACT (Best Available Control Technology) [326 IAC 8-1-6]

- Pursuant to CP 003-9243-00286 on May 1, 1998, and 326 IAC 8-1-6, the afterburner, determined to be the best available control technology, shall be operated at all times that the thermal chip dryer is in operation. When operating, the afterburner must maintain a minimum VOC capture efficiency of ninety-nine percent (99%) and a minimum VOC destruction efficiency of ninety-nine percent (99%). Compliance with this requirement will render the requirements of 326 IAC 2-2 and 40 CFR 52.21 not applicable.
- (b) From the date of issuance of this permit until the approved stack test results are available, the Permittee shall operate the afterburner at or above the hourly average temperature of 1,300 degrees Fahrenheit.
- (c) The Permittee shall determine temperature and fan amperage from the most recent valid stack test that demonstrates compliance with limits in (a) of this condition, as approved by IDEM.
- (d) On or after the date the approved stack test results are available, the Permittee shall operate the afterburner at or above the average temperature, residence time, and airflow as observed during the compliant stack test.

D.3.8 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emissions rate from the thermal chip dryer shall not exceed 13.62 pounds per hour when operating at a process weight rate of 6 tons of metal per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.3.9 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control devices. If the OM&M plan required by condition D.3.6 is developed in accordance with Section B- Preventive Maintenance Plans, then after the OM&M plan has been approved, it shall satisfy the requirements of this condition.

Compliance Determination Requirements

D.3.10 Equations for Determining Compliance [40 CFR 63.1513]

The owner or operator of a thermal chip dryer must use the equations listed in 40 CFR 63.1513 in order to determine compliance with the applicable emission limits in Condition D.3.3.

D.3.11 Particulate Control

Pursuant to CP-003-9243-00286, issued on May 1, 1998, and in order to comply with conditions D.3.1, and D.3.8, the owner or operator shall operate a fabric filter baghouse at all times the thermal chip dryer is in operation.

D.3.12 Afterburner Compliance Requirements [40 CFR 63.1506(f)]

Pursuant to CP-003-9243-00286, issued on May 1, 1998, 40 CFR 63.1506(f) and in order to comply with condition D.3.7, the owner or operator shall operate the afterburner, determined to be the best

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available control technology (BACT), at all times the thermal chip dryer is in operation, in accordance with the OM&M plan. For the afterburner, the owner or operator must:

- (1) Maintain the 3-hour block average operating temperature of each afterburner at or above the average temperature established during the performance test
- (2) Operate each afterburner in accordance with the OM&M plan.
- (3) Operate the thermal chip dryer using only unpainted aluminum chips as the feedstock.

D.3.13 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11][40 CFR 63.1511][40 CFR 63.1512]

- (a) Prior to June 24, 2006, the Permittee shall perform VOC testing on the thermal chip dryer utilizing methods as approved by the Commissioner to ensure compliance with the destruction efficiency requirement of Condition D.3.7 (326 IAC 8-1-6). This test shall be repeated at least once every five years from the date of this valid compliance demonstration.
- (b) Prior to March 18, 2008, the Permittee must conduct a performance test to measure D/F and THC emissions at the outlet of the control device while the thermal chip dryer processes only uncoated aluminum chips. This test shall be completed utilizing methods as approved by the Commissioner to ensure compliance with Condition D.3.3 and repeated at least once every five (5) years from the date of valid compliance demonstration. The Permittee is subject to the testing/compliance requirements and demonstration procedures as described in 40 CFR 63.1511 and 40 CFR 63.1512.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.14 Capture/Collection System [40 CFR 63.1510(d)(2)]

The owner or operator shall, for the thermal chip dryer, inspect each capture/collection and closed vent system associated with the dryer at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in 40 CFR 63.1506(c) and record the results of each inspection.

D.3.15 Feed/Charge Determination [40 CFR 63.1510(e)]

The owner or operator of the thermal chip dryer must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the dryer over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. The accuracy of the weight measurement device or procedure must be ± 1 percent of the weight being measured.

D.3.16 Afterburner Monitoring Requirements [40 CFR 63.1510(g)]

The owner or operator of a thermal chip dryer using an afterburner for control shall:

- (a) Install, calibrate, maintain, and operate a device to continuously monitor and record the operating temperature of the afterburner consistent with the requirements of continuous monitoring systems in 40 CFR Part 63 Subpart A.
- (b) The temperature monitoring device must:
 - (1) Be installed at the exit of each afterburner's combustion zone.
 - (2) Record the temperature in 15-minute block averages and determine and record the average temperature for each 3-hour block period.

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- (3) Have a recorder response range including zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(m).
- (4) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.
- (c) Conduct an inspection of each afterburner at least once a year and record the results. At a minimum, an inspection must include:
 - (1) Inspection of all burners, pilot assemblies, and pilot sensing devices for proper operation and clean pilot sensor;
 - (2) Inspection for proper adjustment of combustion air;
 - (3) Inspection of internal structures (e.g., baffles) to ensure structural integrity;
 - (4) Inspection of dampers, fans, and blowers for proper operation;
 - (5) Inspection for proper sealing;
 - (6) Inspection of motors for proper operation;
 - (7) Inspection of combustion chamber refractory lining and clean and replace lining as necessary;
 - (8) Inspection of afterburner shell for corrosion and/or hot spots;
 - (9) Documentation verifying that, for the burn cycle following the inspection, the afterburner is operating properly and all necessary adjustments have been made;
 - (10) Verification that the equipment is maintained in good operating condition.
 - (11) Following an equipment inspection, all necessary repairs must be completed in accordance with the requirements of the OM&M plan.

D.3.17 Corrective Action for 40 CFR 63, Subpart RRR [40 CFR 63.1506(p)]

When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established and incorporated in the OM&M plan, the owner or operator shall initiate corrective action.

The corrective action taken, shall restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

In addition, the corrective actions taken shall include follow-up actions necessary to return the process or control device parameter level(s) to the applicable value or range of values, and steps to prevent the likely recurrence of the cause of a deviation.

D.3.18 Visible Emissions Notations

(a) Visible emission notations of the exhaust from stack D shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

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(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports, shall be considered a deviation from this permit.

D.3.19 Parametric Monitoring

- (a) The Permittee shall record the total static pressure drop across the baghouse, used in conjunction with the thermal chip dryer, at least once per shift when the dryer is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) The instrument used for determining the pressure shall comply with Section C Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.3.20 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the thermal chip dryer when venting to the atmosphere. Inspections required by this condition shall not be performed in consecutive months. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. All defective bags shall be replaced.

D.3.21 Broken or Failed Bag Detection

In the event that bag failure has been observed.

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B - Emergency Provisions). Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

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(b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.3.22 Secondary Aluminum Production Record Keeping Requirements [40 CFR Part 63, Subpart RRR]

 Pursuant to 40 CFR Part 63.1517 the owner or operator of a thermal chip dryer shall:
 - (a) As required by 40 CFR 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and Subpart RRR.
 - (b) The owner or operator must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.
 - (c) The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.
 - (d) In addition to the general records required by 40 CFR 63.1510(b), the owner or operator of a thermal chip dryer must maintain records of:
 - (1) The number of total operating hours for the affected source or emission unit during each 6-month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action(s) taken.
 - (2) 15-minute block average afterburner operating temperature, including any period when the average temperature in any 3-hour block period falls below the compliant operating parameter value with a brief explanation of the cause of the excursion and the corrective action taken; and annual afterburner inspections.
 - (3) For each continuous monitoring system, records required by 40 CFR 63.10(c).
 - (4) Feed charge (or throughput) weights for each operating cycle or time period used in the performance test.
 - (5) All charge materials.
 - (6) Annual inspections of emission capture/collection and closed vent systems.
 - (7) Any approved alternative monitoring or test procedure.
 - (8) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:
 - (A) Startup, shutdown, and malfunction plan;

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- (B) For major sources, OM&M plan; and
- (C) Site-specific secondary aluminum processing unit emission plan (if applicable).

D.3.23 Record Keeping Requirements

- (a) To document compliance with Condition D.3.18, the Permittee shall maintain records of the once per shift visible emission notations during daylight operations.
- (b) To document compliance with Condition D.3.19, the Permittee shall maintain records of the total differential static pressure drop once per shift during normal operation.
- (c) To document compliance with Condition D.3.20, the Permittee shall maintain records of the results of the inspections required under Condition D.3.20.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

D.3.24 Secondary Aluminum Production Reporting Requirements [40 CFR Part 63, Subpart RRR] Pursuant to 40 CFR 63.1510 and 40 CFR 63.1516 the owner or operator shall:

- (a) Submit initial notifications to the applicable permitting authority as described below.
 - (1) The owner or operator must provide notification of the anticipated date for conducting performance tests and visible emission observations. The owner or operator must notify the Administrator of the intent to conduct a performance test at least 60 days before the performance test is scheduled; notification of opacity or visible emission observations for a performance test must be provided at least 30 days before the observations are scheduled to take place.
 - (2) The owner or operator must provide additional notifications for sources with continuous emission monitoring systems or continuous opacity monitoring systems.
- (b) Each owner or operator must submit a notification of compliance status report within 60 days after the compliance dates specified in 40 CFR 63.1501. The notification must be signed by the responsible official who must certify its accuracy. A complete notification of compliance status report must include the information specified in paragraphs (a)(1) through (10) of this section. The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination. If an owner or operator submits the information specified in this section at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report must include:
 - (1) All information required in 40 CFR 63.9(h). The owner or operator must provide a complete performance test report for each affected source and emission unit for which a performance test is required. A complete performance test report includes all data, associated measurements, and calculations (including visible emission and opacity tests).
 - (2) The approved site-specific test plan and performance evaluation test results for each continuous monitoring system (including a continuous emission or opacity monitoring system).

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(3) Unit labeling as described in 40 CFR 63.1506(b), including process type or classification and operating requirements.

- (4) The compliant operating parameter value or range established for each affected source or emission unit with supporting documentation and a description of the procedure used to establish the value (e.g., lime injection rate, afterburner operating temperature, fabric filter inlet temperature), including the operating cycle or time period used in the performance test.
- (5) Design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in 40 CFR 63.1506(c).
- (6) Approved OM&M plan (including site-specific monitoring plan for each group 1 furnace with no add-on air pollution control device).
- (7) Startup, shutdown, and malfunction plan, with revisions.
- (c) The owner or operator must develop and implement a written plan that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include:
 - (1) Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
 - (2) Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.
- (d) The owner or operator must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in 40 CFR 63.10(c). When no deviations of parameters have occurred, the owner or operator must submit a report stating that no excess emissions occurred during the reporting period.

A report must be submitted if any of these conditions occur during a 6-month reporting period:

- (1) An excursion of a compliant process or operating parameter value or range (e.g., lime injection rate or screw feeder setting, afterburner operating temperature, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter).
- (2) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).
- (3) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of Subpart RRR.
- (e) The owner or operator must submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and

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procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested.

- (f) For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:
 - (1) Any period of excess emissions, as defined the semiannual report, that occurred during the year were reported as required by this subpart; and
 - (2) All monitoring, record keeping, and reporting requirements were met during the year.

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OFFICE OF AIR QUALITY

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PART 70 OPERATING PERMIT CERTIFICATION

Responsible Official: CEO & President

Source Name: Superior Aluminum Alloys Source Address: 14214 Edgerton Road

Mailing Address: P O Box 678, New Haven, IN 46774

Part 70 Permit No.: T003-11452-00286

| This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit. | | | | | | | |
|---|--|--|--|--|--|--|--|
| Please check what document is being certified: | | | | | | | |
| Annual Compliance Certification Letter | | | | | | | |
| ? Test Result (specify) | | | | | | | |
| ? Report (specify) | | | | | | | |
| ? Notification (specify) | | | | | | | |
| ? Affidavit (specify) | | | | | | | |
| ? Other (specify) | | | | | | | |
| | | | | | | | |
| I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. | | | | | | | |
| Signature: | | | | | | | |
| Printed Name: | | | | | | | |
| Title/Position: | | | | | | | |
| Date: | | | | | | | |

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

COMPLIANCE BRANCH P.O. Box 6015 100 North Senate Avenue Indianapolis, Indiana 46206-6015 Phone: 317-233-5674 Fax: 317-233-5967

PART 70 OPERATING PERMIT EMERGENCY OCCURRENCE REPORT

CEO & President Responsible Official:

Source Name: Superior Aluminum Alloys Source Address: 14214 Edgerton Road

Mailing Address: P O Box 678, New Haven, IN 46774

Part 70 Permit No.: T003-11452-00286

This form consists of 2 pages

Page 1 of 2

| ? | This is an emergency as defined in 326 IAC 2-7-1(12) | | | | | | | |
|---|--|---|--|--|--|--|--|--|
| | ? | The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours | | | | | | |
| | | (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and | | | | | | |
| | ? | The Permittee must submit notice in writing or by facsimile within two (2) days | | | | | | |
| | | (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16 | | | | | | |

If any of the following are not applicable, mark N/A Facility/Equipment/Operation: Control Equipment: Permit Condition or Operation Limitation in Permit: Description of the Emergency: Describe the cause of the Emergency:

Reviewer: ERG/BS

Superior Aluminum Alloys, L.L.C. First Significant Permit Modification No.: 003-17183-00286 New Haven, Indiana Modified by: ERG/BS

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If any of the following are not applicable, mark N/A

| <u> </u> | |
|--|--|
| Date/Time Emergency started: | |
| Date/Time Emergency was corrected: | |
| Was the facility being properly operated a Describe: | at the time of the emergency? Y N |
| Type of Pollutants Emitted: TSP, PM-10, | SO ₂ , VOC, NO _x , CO, Pb, other: |
| Estimated amount of pollutant(s) emitted | during emergency: |
| Describe the steps taken to mitigate the | problem: |
| Describe the corrective actions/response | steps taken: |
| Describe the measures taken to minimize | e emissions: |
| | ontinued operation of the facilities are necessary to prevent ge to equipment, substantial loss of capital investment, or loss economic value: |
| Form Completed by: | |
| Title / Position: | |
| Date: | |
| Phone: | |

A certification is not required for this report.

Reviewer: ERG/BS

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY **COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Superior Aluminum Alloys Source Address: 14214 Edgerton Road

Mailing Address: P O Box 678, New Haven, IN 46774

Part 70 Permit No.: T003-11452-00286

Facility: Four Reverberatory Furnaces (Furnaces #1 through #4)

Parameter: Amount of flux material fed to each furnace

Limit: 11,205,135 pounds per twelve consecutive month period

YEAR: _____

| | Column 1 | | | Column 2 | | | | Column 1 + Column 2 | | | | |
|---------|------------|----|----|--------------------|----|----|----|---------------------|----|----|----|----|
| Month | This Month | | | Previous 11 Months | | | | 12 Month Total | | | | |
| | #1 | #2 | #3 | #4 | #1 | #2 | #3 | #4 | #1 | #2 | #3 | #4 |
| Month 1 | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Month 2 | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Month 3 | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

| ? | No deviation | n occurred in this quarter. |
|-------|--------------|--|
| ? | | occurred in this quarter. as been reported on: |
| Title | | |

Attach a signed certification to complete this report.

Phone:

Reviewer: ERG/BS

Superior Aluminum Alloys, L.L.C. First Significant Permit Modification No.: 003-17183-00286 Modified by: ERG/BS

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

| Responsible Official: Source Name: Source Address: Mailing Address: Part 70 Permit No.: Facility: Parameter: Limit: | Total amount of scra 300,000,000 pounds | d | | | | |
|--|--|--------------------|---------------------|--|--|--|
| M. d | Column 1 | Column 2 | Column 1 + Column 2 | | | |
| Month | This Month | Previous 11 Months | 12 Month Total | | | |
| Month 1 | | | | | | |
| Month 2 | | | | | | |
| Month 3 | | | | | | |
| ? No deviation occurred in this quarter. ? Deviation/s occurred in this quarter. Deviation has been reported on: | | | | | | |
| Submitted by: Title / Position: Signature: Date: | | | | | | |

Attach a signed certification to complete this report.

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION**

PART 70 OPERATING PERMIT QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Responsible Official: CEO & President

Source Name: Superior Aluminum Alloys Source Address: 14214 Edgerton Road

| Part 70 Permit No.: T003-11452-00286 | 46//4 | | | | | |
|--|------------------------|--|--|--|--|--|
| Months: to | Year: | | | | | |
| | Page 1 of 2 | | | | | |
| This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period". | | | | | | |
| ? NO DEVIATIONS OCCURRED THIS REPORTING | PERIOD. | | | | | |
| ? THE FOLLOWING DEVIATIONS OCCURRED THIS | S REPORTING PERIOD | | | | | |
| Permit Requirement (specify permit condition #) | | | | | | |
| Date of Deviation: | Duration of Deviation: | | | | | |
| Number of Deviations: | Number of Deviations: | | | | | |
| Probable Cause of Deviation: | | | | | | |
| Response Steps Taken: | | | | | | |
| Permit Requirement (specify permit condition #) | | | | | | |
| Date of Deviation: | Duration of Deviation: | | | | | |
| Number of Deviations: | | | | | | |
| Probable Cause of Deviation: | | | | | | |
| Response Steps Taken: | | | | | | |

Reviewer: ERG/BS

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|---|------------------------|
| Permit Requirement (specify permit condition #) | |
| Date of Deviation: | Duration of Deviation: |
| Number of Deviations: | |
| Probable Cause of Deviation: | |
| Response Steps Taken: | |
| Permit Requirement (specify permit condition #) | |
| Date of Deviation: | Duration of Deviation: |
| Number of Deviations: | |
| Probable Cause of Deviation: | |
| Response Steps Taken: | |
| Permit Requirement (specify permit condition #) | |
| Date of Deviation: | Duration of Deviation: |
| Number of Deviations: | |
| Probable Cause of Deviation: | |
| Response Steps Taken: | |
| Form Completed By: | |
| Title/Position: | |
| | |
| Date: | |
| Phone: | |

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for a Significant Permit Modification to a Part 70 Operating Permit

Source Background and Description

Source Name: Superior Aluminum Alloys, LLC

Source Location: 14214 Edgerton Road, New Haven, IN 46774

County: Allen SIC Code: 3341

Operation Permit No.: T003-11452-00286

Operation Permit Issuance Date: June 24, 2002

Significant Permit Modification No.: 003-17183-00286

Permit Reviewer: ERG/BS

On October 8, 2003, the Office of Air Quality (OAQ) had a notice published in the Ft. Wayne Journal Gazette, Fort Wayne, Indiana, stating that Superior Aluminum Alloys, LLC had applied for significant permit modification to a Part 70 Operating Permit relating to the reclassification of an existing dryer as a *thermal chip dryer*, as defined by 40 CFR 63.1503. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On October 22, 2003 and November 6, 2003, Superior Aluminum Alloys, LLC provided comments on the proposed Part 70 permit modification. The following is a summary of the comments and responses to those comments including any changes to the permit. Bold language has been added, language with a line through it has been deleted. The Table Of Contents has been modified, if applicable, to reflect these changes.

Comment 1:

As indicated in the TSD for this permit modification, the bag leak detection provisions, pursuant to 40 CFR Part 63, Subpart RRR, are not required for a thermal chip dryer. However, there are a few remaining references to such requirements in permit section D.3. Please remove all Subpart RRR references to bag leak detection and PM control for the thermal chip dryer.

Response to Comment 1:

A bag leak detection system, pursuant to 40 CFR 63.1506, is not required for a thermal chip dryer because 40 CFR Part 63, Subpart RRR does not limit particulate emissions from such a unit. As a result, the baghouse is not required to comply with the provisions of 40 CFR Part 63, Subpart RRR. Note that the baghouse is required to render the requirements of 326 IAC 2-2 not applicable and comply with 326 IAC 6-3-2. As a result, visible emission notations must be performed. The following changes have been made to the permit as a result of this comment.

D.3.11 Particulate Control

(g)

Pursuant to CP-003-9243-00286, issued on May 1, 1998, 40 CFR 63.1506(c), and in order to comply with **C**eonditions D.3.1, D.3.3, and D.3.8, the owner or operator shall operate a fabric filter baghouse at all times the thermal chip dryer is in operation, in accordance with the OM&M plan.

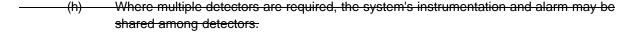
D.3.18 Visible Emissions Notations

- (a) Visible emission notations of the exhaust from stack D shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records and Reports, shall be considered a deviation from this permit.

D.3.16 Fabric Filter Monitoring Requirements [40 CFR 63.1510(f)] These requirements apply to the owner or operator of the thermal chip dryer using a fabric filter with a bag leak detection system. (a) The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less. The bag leak detection system sensor must provide output of relative or absolute PM loadings. (e) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor. The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.

For negative pressure or induced air fabric filters, the bag leak detector must be installed

downstream of the fabric filter.



- (i) The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
- (j) Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.

D.3.23 Record Keeping Requirements

- (a) To document compliance with Condition D.3.18, the Permittee shall maintain records of the once per shift visible emission notations during daylight operations.
- (a b) To document compliance with Condition D.3.19, the Permittee shall maintain records of the total differential static pressure drop once per shift during normal operation.
- (**b c**) To document compliance with Condition D.3.20, the Permittee shall maintain records of the results of the inspections required under Condition D.3.20.
- (e d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

D.3.24 Secondary Aluminum Production Reporting Requirements [40 CFR Part 63, Subpart RRR]

(b) Each owner or operator must submit a notification of compliance status report within 60 days after the compliance dates specified in 40 CFR 63.1501. The notification must be signed by the responsible official who must certify its accuracy. A complete notification of compliance status report must include the information specified in paragraphs (a)(1) through (10) of this section. The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination. If an owner or operator submits the information specified in this section at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report must include:

. . .

- (6) If applicable, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in 40 CFR 63.1510(f).
- (**7 6**) Approved OM&M plan (including site-specific monitoring plan for each group 1 furnace with no add-on air pollution control device).
- (87) Startup, shutdown, and malfunction plan, with revisions.
- (d) The owner or operator must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in 40 CFR 63.10(c).

When no deviations of parameters have occurred, the owner or operator must submit a report stating that no excess emissions occurred during the reporting period.

A report must be submitted if any of these conditions occur during a 6-month reporting period:

- (1) The corrective action specified in the OM&M plan for a bag leak detection system alarm was not initiated within 1 hour.
- (2 1) An excursion of a compliant process or operating parameter value or range (e.g., lime injection rate or screw feeder setting, afterburner operating temperature, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter).
- (3 2) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).
- (4 3) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of Subpart RRR.

Comment 2:

Please change the "Explanation for Modification" section of the TSD such that the description of the dryer states that the nominal drying capacity, rather than the maximum drying capacity, is 12,000 pounds of uncoated aluminum chips per hour.

Response to Comment 2:

The OAQ prefers that the Technical Support Document reflect the version of the permit that was on public notice. Changes to the permit that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. No changes were made to the TSD as a result of this comment. However, Sections A.2 and D.3 of the permit have been changed as follows:

(c) One (1) natural gas-fired thermal chip dryer, identified as unit D, constructed in 1998, with a maximum nominal drying capacity of 12,000 pounds of uncoated aluminum chips per hour and a heat input of 6.0 MMBtu/hr, with emissions controlled by fabric filter baghouse D and a 12.0 MMBtu/hr afterburner, and exhausting to stack D.

Comment 3:

Please change the "Justification for Modification" section of the TSD to state that the dryer's reclassification does not cause "a significant relaxation in, and removal of, existing limits and requirements." Instead, it updates the permit terms to reflect the applicable requirements of 40 CFR Part 63, Subpart RRR.

Response to Comment 3:

The OAQ acknowledges that the dryer re-classification causes the need for an update in the permit terms to reflect the applicable 40 CFR Part 63, Subpart RRR requirements. However, emissions from the dryer were previously limited, in an existing Part 70 permit, to 0.08 pounds of particulate matter (PM) and 0.80 pounds of hydrochloric acid (HCI) per ton of feed/charge. These 40 CFR Part 63, Subpart RRR limitations are no longer present as a direct result of the dryer re-classification.

Therefore, the re-classification does result in a "significant relaxation in, and removal of, existing limits and requirements."

As explained in Response to Comment 2, no changes have been made to the TSD as a result of this comment.

Comment 4:

Please remove all references to 40 CFR 52.21 in the TSD and permit because Indiana's PSD program has been approved by the U.S. EPA.

Response to Comment 4:

Emissions from the furnaces, shredder and dryer are all limited to render the requirements of Prevention of Significant Deterioration (PSD) not applicable. Those limitations were established pursuant to CP 003-9243-00286, issued May 1, 1998, and T003-11452-00286, issued June 24, 2002. Those approvals, and the corresponding PSD requirements, became effective and federally enforceable prior to the approval of Indiana's PSD program on April 2, 2003. As a result, the respective requirements are still subject to 40 CFR 52.21 and the corresponding references shall remain in the permit.

No changes were made as a result of this comment.

Comment 5:

Pursuant to 40 CFR 63.1511(e), the repeat testing required to ensure compliance with the applicable 40 CFR Part 63, Subpart RRR limitations is required every five (5) years. The permit currently requires repeat testing every 2.5 years. Please change Condition D.3.13(b) accordingly.

Response to Comment 5:

The following change has been made to the permit pursuant to 40 CFR 63.1511(e):

D.3.13 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11][40 CFR 63.1511][40 CFR 63.1512]

(b) Prior to September March 18, 20058, the Permittee must conduct a performance test to measure D/F and THC emissions at the outlet of the control device while the thermal chip dryer processes only uncoated aluminum chips. This test shall be completed utilizing methods as approved by the Commissioner to ensure compliance with Condition D.3.3 and repeated at least once every two and one-half (2.5) five (5) years from the date of valid compliance demonstration. The Permittee is subject to the testing/compliance requirements and demonstration procedures as described in 40 CFR 63.1511 and 40 CFR 63.1512.

Upon further review, the OAQ has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The Table Of Contents has been modified, if applicable, to reflect these changes.

D.3.20 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the thermal chip dryer when venting to the atmosphere. **Inspections required by this condition shall not be performed in consecutive months.** A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. All defective bags shall be replaced.

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Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Significant Permit Modification to a Part 70 Operating Permit

Source Background and Description

Source Name: Superior Aluminum Alloys, L.L.C.

Source Location: 14214 Edgerton Road, New Haven, IN 46774

County: Allen SIC Code: 3341

Operation Permit No.: T003-11452-00286
Operation Permit Issuance Date: June 24, 2002
Significant Permit Modification No.: 003-17183-00286

Permit Reviewer: ERG/BS

The Office of Air Quality (OAQ) has reviewed a significant permit modification application from Superior Aluminum Alloys ("Superior Aluminum") relating to the reclassification of an existing dryer as a *thermal chip dryer*, as defined by 40 CFR 63.1503.

Explanation of Modification

Superior Aluminum was issued a Part 70 permit (T003-11452-00286) on June 24, 2002 for the operation of four (4) reverberatory furnaces, one (1) rotary furnace, one (1) scrap shredder, and one (1) scrap dryer. During the review of the Part 70 permit application, it was determined that the dryer met the description of a *scrap dryer/delacquering kiln/decoating kiln* as defined by 40 CFR 63.1503. As a result, the Part 70 permit contained the applicable requirements, pursuant to 40 CFR Part 63 Subpart RRR, for a *scrap dryer/delacquering kiln/decoating kiln*. On February 5, 2003, Superior Aluminum informed the OAQ that the dryer is not used to remove various organic components from coated and uncoated aluminum scrap. Instead, the dryer removes water and oil from unpainted and uncoated aluminum chips. Therefore, the dryer is hereby classified as a *thermal chip dryer*, pursuant to 40 CFR 63.1503, and described as follows:

One (1) natural gas-fired thermal chip dryer, identified as unit D, constructed in 1998, with a maximum drying capacity of 12,000 pounds of uncoated aluminum chips per hour and a heat input of 6.0 MMBtu/hr, with emissions controlled by fabric filter baghouse D and a 12.0 MMBtu/hr afterburner, and exhausting to stack D.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

| Stack ID | Operation | Height | Diameter | Flow Rate | Temperature |
|----------|-----------|--------|----------|-----------|-------------|
| | | (feet) | (feet) | (acfm) | (°F) |

| D | aluminum drving | 40 | 3 | 40 000 | 125 |
|---|-----------------|----|---|--------|-----|
| | alaminam arying | 7 |) | 70,00 | 120 |

Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on February 5, 2003.

Emission Calculations

See Appendix A (page 1) of this document for detailed emissions calculations. The dryer, when previously classified as a *scrap dryer/delacquering kiln/decoating kiln*, had a potential to emit 84.1 tons per year Hydrogen Chloride (a HAP) and 0.15 tons per year from all other HAPs. These HAP PTE estimates accounted for: 1) any chloride flux that could have been introduced to remove impurities from the scrap aluminum, and 2) the combustion of various coatings on the scrap aluminum. The dryer, now classified as a *thermal chip dryer*, has the potential to emit a negligible amount of HAPs because thermal chip dryers do not: 1) utilize chloride fluxes to remove impurities, and 2) process coated aluminum scrap. As a result, the 18 MMBtu/hr (dryer and afterburner capacity) combustion of natural gas is the only source of HAP emissions from the dryer; and such emissions are negligible. Therefore, Appendix A does not contain emission calculations for HAPs from the thermal chip dryer. This is consistent with the emission calculations for similar units as found in T069-7421-00031 for Hayes Lemmerz International, issued April 16, 2002, and F005-14161-00043 for M.C. Aluminum America, public noticed on September 20, 2002.

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the increase in allowable emissions from the reclassification of the thermal chip dryer.

| Pollutant | Potential To Emit (tons/year) |
|-----------------|-------------------------------|
| PM | 16.24 |
| PM-10 | 16.24 |
| SO ₂ | 0 |
| VOC | 19.45 |
| СО | 0 |
| NO _x | 0 |

The HAP emissions from the thermal chip dryer are negligible.

Justification for Modification

The Part 70 operating permit (T003-11452-00286, issued June 24, 2002) is being modified through a Part 70 Significant Permit Modification. This permit modification is being performed pursuant to 326 IAC 2-7-12(d) because the change in the dryer's classification to a *thermal chip dryer* from a

scrap dryer/delacquering kiln/decoating kiln, pursuant to 40 CFR 63.1503, causes a significant relaxation in, and removal of, existing emission limits and requirements. See the Proposed Changes section of this document for more information.

County Attainment Status

The source is located in Allen County.

| Pollutant | Status | | |
|-----------------|------------|--|--|
| PM-10 | attainment | | |
| SO ₂ | attainment | | |
| NO ₂ | attainment | | |
| Ozone | attainment | | |
| СО | attainment | | |
| Lead | attainment | | |

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Allen County has been designated as attainment for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration).
- (b) Allen County has been classified as attainment or unclassifiable for all criteria pollutants and lead. Therefore, these emissions were reviewed pursuant to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration).
- (c) Fugitive Emissions
 This type of operation is one of the twenty-eight (28) listed source categories (a secondary metal production plant) under 326 IAC 2-2; therefore, the fugitive emissions are counted toward determination of Prevention of Significant Deterioration and Emission Offset applicability.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited).

| Pollutant | Emissions (tons/year) |
|-----------------|-----------------------|
| PM | 12.5 |
| PM-10 | 12.4 |
| SO_2 | 19.4 |
| VOC | 23.1 |
| СО | 32.3 |
| NO _x | 58.8 |

(a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 100 tons per year or more, as it is one of the 28 listed source categories.

(b) These emissions are based on the information provided in the Technical Support Document from T003-11452-00286, issued June 24, 2002; revised to account for the removal of the Rotary Furnace (MSM 003-15914-00286, issued November 18, 2002) and the reclassification of the dryer (via this permit).

Potential to Emit of the Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable pursuant to T033-11452-00286, issued June 24, 2002.

| Potential to Emit After Issuance (tons/year) | | | | | | | |
|---|----------------------|----------------------|-----------------|---------------------|------|--------|----------------------|
| Process/facility | PM | PM-10 | SO ₂ | VOC | СО | NO_X | HAPs |
| Thermal Chip Dryer | 18.34 ^(a) | 18.34 ^(a) | 11.08 | 21 ^(b,c) | 6.49 | 31.38 | Negl. ^(c) |

Negl. - Negligible; emissions less than 0.01 tons per year.

Unless otherwise noted, the emissions presented in the table above are equal to the controlled potential to emit.

- (a) Pursuant to T003-11452-00286, issued June 24, 2002, the particulate matter emissions from the dryer are limited to 4.188 pounds per hour, equivalent to 18.34 tons per year, in order to render the requirements of 326 IAC 2-2 and 40 CFR 52.21 not applicable.
- (b) Pursuant to T003-11452-00286, issued June 24, 2002, and in order to satisfy the requirements of 326 IAC 8-1-6 (BACT), the VOC emissions from the dryer shall be controlled by an afterburner. See Appendix A for more information. The VOC emissions from the thermal chip dryer are also limited pursuant to 40 CFR Part 63 Subpart RRR.
- (c) As explained in the *Emissions Calculations* section of this document, the HAP emissions from the thermal chip dryer (including natural gas combustion) are negligible. Pursuant to 40 CFR Part 63 Subpart RRR, emissions from the thermal chip dryer shall not exceed 3.5×10^{-5} gr D/F per ton Al fed and 0.8 lb THC per ton Al fed. Based on the dryer's maximum capacity, these limits are equivalent to 1.3×10^{-7} tons D/F per year and 21 tons THC per year.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) The dryer, now classified as a *thermal chip dryer*, is subject to the National Emission Standards for Hazardous Air Pollutants, for Secondary Aluminum Production, 40 CFR 63.1500 (Subpart RRR), 326 IAC 14, and 326 IAC 20-1-1. Pursuant to 40 CFR 63.1501(b), the owner or operator of an existing affected source that commenced construction after February 11, 1999 must comply with the applicable requirements of Subpart RRR by March 24, 2003. Pursuant to 40 CFR Part 63 Subpart RRR, and 326 IAC 20-1-1, the owner or operator of a thermal chip dryer must not discharge or cause to be discharged to the atmosphere emissions in excess of:
 - (1) 2.5 micrograms total polychlorinated dibenzofurans (D/F) international Toxicity Equivalent (TEQ) per megagram (3.5 x 10⁻⁵ gr per ton) of feed/charge.
 - (2) 0.8 pounds THC (Total Hydrocarbon), as propane, per ton of feed/charge.

The necessary compliance determination, monitoring, record keeping, and reporting requirements, pursuant to 40 CFR Part 63 Subpart RRR, to which the thermal chip dryer is subject, are listed in Section D.3 of the attached permit. Note that several Subpart RRR requirements have changed as a result of the reclassification. See the Proposed Changes section of this document for more information.

The Permittee submitted an Operation, Maintenance, and Monitoring (OM&M) plan on March 28, 2003.

- (c) The requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) are not applicable to this source because the source does not include one or more units that belong to one or more source categories affected by the Section 112(j) MACT Hammer date of May 15, 2002.
- (d) The thermal chip dryer is subject to the provisions of 40 CFR Part 64, Compliance Assurance Monitoring (CAM). In order for this rule to apply, a pollutant specific emissions unit at a Part 70 or 71 source must meet three criteria for a given pollutant: 1) the unit is subject to an emission limitation or standard for the applicable regulated air pollutant, 2) the unit uses a control device to achieve compliance with any such emission limitation or standard, and, 3) the unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal or greater than 100 percent of the amount required for a source to be classified as a major source. The thermal chip dryer satisfies each of these criteria with respect to PM and VOC. Therefore, the thermal chip dryer is subject to the requirements of 40 CFR Part 64. However, pursuant to 40 CFR 64.2(b)(1)(i), the 40 CFR Part 63 Subpart RRR requirements applicable to the thermal chip dryer satisfy the requirements of 40 CFR Part 64.

State Rule Applicability - Entire source

326 IAC 1-5-2 (Emergency Reduction Plans)

The source submitted an Emergency Reduction Plan (ERP) on December 1, 1999.

326 IAC 1-6-3 (Preventive Maintenance Plan)

The source submitted Preventive Maintenance Plans (PMPs) on June 4, 1999.

326 IAC 2-2 (Prevention of Significant Deterioration)

Pursuant to T003-11452-00286, issued June 24, 2002, and 003-16496-00286, issued November 27, 2002, this source is a PSD minor source because the source's potential to emit SO_2 and CO is less than 100 tons per year and the source's PM, PM10, VOC, and NO_x emissions are limited to less than 100 tons per year. The source belongs to 1 of the 28 PSD source categories.

This modification is not subject to the requirements of 326 IAC 2-2 because the reclassification of the dryer (from a scrap dryer to a thermal chip dryer) does not result in a physical or operational change.

Pursuant to T003-11452-00286, issued June 24, 2002, and in order to render the requirements of 326 IAC 2-2 and 40 CFR 52.21 not applicable, the particulate matter (PM) emissions from the thermal chip dryer (previously identified as the scrap dryer) shall not exceed 4.188 pounds per hour. This limitation is equivalent to PM emissions of less than or equal to 18.34 tons per year.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of PM, PM10, VOC, and NO_x . Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1st of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Thermal Chip Dryer

326 IAC 2-4.1 (Hazardous Air Pollutants)

The thermal chip dryer has the potential to emit hazardous air pollutants (HAPs) less than ten tons per year of any single HAP and less than 25 tons of any combination of HAPs and was constructed prior to July 27, 1997. The reclassification of the dryer does not result in a physical or operational change which could be considered a "reconstruction" of the dryer. Therefore, the requirements of 326 IAC 2-4.1 do not apply to the thermal chip dryer.

326 IAC 6-3-2 (Particulate Emission Limitations from Manufacturing Processes)

Pursuant to T003-11452-00286, issued June 24, 2002, and 326 IAC 6-3-2, the allowable particulate emissions from the thermal chip dryer (previously identified as the scrap dryer) shall not exceed 13.62 pounds per hour based on a maximum process weight rate of 6.0 tons of aluminum chips per hour.

The pound per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

The baghouse for particulate control shall be in operation at all times the thermal chip dryer is in operation, in order to comply with this limit.

326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations)

The thermal chip dryer has a potential to emit SO_2 less than 25 tons per year. Therefore, the thermal chip dryer is not subject to the requirements of 326 IAC 7-1.1-2.

326 IAC 8-1-6 (New Facilities; general reduction requirements)

IDEM, OAQ reviewed the RACT, BACT, LAER Clearinghouse (RBLC) and determined that BACT for the thermal chip dryer is equivalent to the existing BACT for a scrap dryer.

Pursuant to T003-11452-00286, issued June 24, 2002, and 326 IAC 8-1-6, the afterburner, determined to be the best available control technology (BACT), shall be operated at all times that the thermal chip dryer (previously identified as the scrap dryer) is in operation. When operating, the afterburner must maintain a minimum VOC capture efficiency of ninety-nine percent (99%) and a minimum VOC destruction efficiency of ninety-nine percent (99%).

Testing Requirements

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Superior Aluminum Alloys, L.L.C. New Haven, Indiana Permit Reviewer: ERG/BS

Prior to June 24, 2006, the Permittee shall perform VOC testing on the thermal chip dryer utilizing methods as approved by the Commissioner to ensure compliance with 326 IAC 8-1-6. This test shall be repeated at least once every five years from the date of this valid compliance demonstration. The VOC testing does not have to measure or determine capture efficiency because the Permittee has completed the installation of a Permanent Total Enclosure around the thermal chip dryer which provides 100% capture efficiency pursuant to Method 204 standards.

The Permittee completed the initial performance testing for the chip dryer, required pursuant to 40 CFR Part 63 Subpart RRR, on March 18, 2003; prior to the Subpart RRR compliance deadline.

Prior to September 18, 2005, the Permittee must conduct a performance test to measure D/F and THC emissions at the outlet of the control device while the thermal chip dryer processes only uncoated aluminum chips. The test shall be completed utilizing methods as approved by the Commissioner to ensure compliance with 40 CFR Part 63 Subpart RRR and must be repeated at least once every 2.5 years from the date of valid compliance demonstration. The Permittee is subject to the testing/compliance requirements and demonstration procedures as described in 40 CFR 63.1511 and 40 CFR 63.1512.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this modification are as follows:

- (a) The owner or operator shall, for the thermal chip dryer, inspect each capture/collection and closed vent system associated with the dryer at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in 40 CFR 63.1506(c) and record the results of each inspection.
- (b) The owner or operator of the thermal chip dryer must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the dryer over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. The accuracy of the weight measurement device or procedure must be ±1 percent of the weight being measured.
- (c) These requirements apply to the owner or operator of the thermal chip dryer using a fabric filter with a bag leak detection system. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter. Each triboelectric bag

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Superior Aluminum Alloys, L.L.C. New Haven, Indiana Permit Reviewer: ERG/BS

> leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less. The bag leak detection system sensor must provide output of relative or absolute PM loadings. The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor. The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors. The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time. Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.

- (d) The owner or operator of a thermal chip dryer using an afterburner for control shall install, calibrate, maintain, and operate a device to continuously monitor and record the operating temperature of the afterburner consistent with the requirements of continuous monitoring systems in 40 CFR Part 63 Subpart A.. The temperature monitoring device must:
 - (1) Be installed at the exit of each afterburner's combustion zone.
 - (2) Record the temperature in 15-minute block averages and determine and record the average temperature for each 3-hour block period.
 - (3) Have a recorder response range including zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(m).
 - (4) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.
- (e) The owner or operator of a thermal chip dryer using an afterburner for control shall conduct an inspection of each afterburner at least once a year and record the results. At a minimum, an inspection must include:
 - (1) Inspection of all burners, pilot assemblies, and pilot sensing devices for proper operation and clean pilot sensor;
 - (2) Inspection for proper adjustment of combustion air;
 - (3) Inspection of internal structures (e.g., baffles) to ensure structural integrity;
 - (4) Inspection of dampers, fans, and blowers for proper operation;
 - (5) Inspection for proper sealing;
 - (6) Inspection of motors for proper operation;

- (7) Inspection of combustion chamber refractory lining and clean and replace lining as necessary;
- (8) Inspection of afterburner shell for corrosion and/or hot spots;
- (9) Documentation verifying that, for the burn cycle following the inspection, the afterburner is operating properly and all necessary adjustments have been made;
- (10) Verification that the equipment is maintained in good operating condition.
- (11) Following an equipment inspection, all necessary repairs must be completed in accordance with the requirements of the OM&M plan.
- (f) The Permittee shall record the total static pressure drop across the baghouses Đ, used in conjunction with the thermal chip dryer, at least once per shift when the dryer is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. The instrument used for determining the pressure shall comply with Section C Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.
- (g) An inspection shall be performed each calender quarter of all bags controlling the thermal chip dryer when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. All defective bags shall be replaced.
- (h) In the event that bag failure has been observed:
 - (1) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B Emergency Provisions). Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
 - (2) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).

These monitoring conditions are necessary because the baghouse and afterburner for the thermal chip dryer must operate properly to ensure compliance with 40 CFR Part 63 Subpart RRR, 326 IAC 8-1-6 (BACT), 326 IAC 6-3-2, and 326 IAC 2-7 (Part 70), and render the requirements of 326 IAC 2-2 and 40 CFR 52.21 (PSD) not applicable.

Proposed Changes

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

(c) One (1) Scrap natural gas-fired Thermal Chip Dryer, identified as unit D, constructed in 1998, with a maximum drying capacity of 12,000 pounds of uncoated aluminum scrap chips per hour and heat input capacity of 6.0 MMBtu/hr, with emissions controlled by fabric filter baghouse D with manual lime injection and a 12.0 MMBtu/hr afterburner, and exhausting to stack D.

SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Scrap Thermal Chip Dryer

(c) One (1) Scrap natural gas-fired Thermal Chip Dryer, identified as unit D, constructed in 1998, with a maximum drying capacity of 12,000 pounds of uncoated aluminum scrap chips per hour and heat input capacity of 6.0 MMBtu/hr, with emissions controlled by fabric filter baghouse D with manual lime injection and a 12.0 MMBtu/hr afterburner, and exhausting to stack D.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2][40 CFR 52.21]

Pursuant to CP 003-9243-00286, issued on May 1, 1998, and in order to render the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable, the particulate matter (PM) and PM10 emissions from the thermal chip dryer shall not exceed the allowable emission rate of 4.188 pounds per hour. This limitation is equivalent to PM/PM10 emissions of less than or equal to 18.34 tons per year.

D.3.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the shredder thermal chip dryer except when otherwise specified in 40 CFR Part 60, Subpart RRR.

D.3.3 Secondary Aluminum Production Limits [40 CFR Part 63.1505(c)] [40 CFR Part 63.1506]

The scrap dryer is subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 40 CFR Part 63 Subpart RRR. The owner or operator of a scrap dryer thermal chip dryer must not discharge or cause to be discharged to the atmosphere emissions in excess of:

- (1) 0.08 pounds of particulate matter (PM) per ton of feed/charge.
- (2) 0.80 pounds of hydrochloric acid (HCl) per ton of feed/charge.

- (3 1) 0.25 2.5 micrograms total polychlorinated dibenzofurans (D/F) international Toxicity Equivalent (TEQ) per megagram (3.5 x 10⁻⁶ 10⁻⁵ gr per ton) of feed/charge.
- (42) 0.8 pounds THC (Total Hydrocarbon), as propane, per ton of feed/charge.

The Permittee shall be in compliance with the emission limitations and operating requirements by March 24, 2003.

D.3.4 Labeling [40 CFR 63.1506(b)]

On or after the date of approval of the Operation, Maintenance and Monitoring Plan, the Permittee shall provide and maintain easily visible labels posted at the Scrap Dryer. Said labels shall identify the applicable emission limits and means of compliance, including:

- (a) The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln);
- (b) The applicable operational standard(s) and control method(s) (work practice or control device). This includes the applicable operating parameter ranges and requirements as incorporated in the OM&M plan; and
 - (c) The afterburner operating temperature and design residence time.

D.3.5 4 Feed/Charge Determination [40 CFR 63.1506(d)]

D.3.6 5 Capture and Control Systems [40 CFR 63.1506(c)][40 CFR 63.1510(d)]

Pursuant to 40 CFR 63.1506(c), the owner or operator of Scrap Dryer thermal chip dryer must:

D.3.7 6 Operation, Maintenance, and Monitoring (OM&M) Plan [40 CFR 63.1510(b)]

The owner or operator must prepare and implement for the scrap dryer thermal chip dryer, a written operation, maintenance, and monitoring (OM&M) plan. The owner or operator must submit the plan to the applicable permitting authority no later than the compliance date established in 40 CFR 63.1501(a). Any subsequent changes to the plan must be submitted to the applicable permitting authority for review and approval. Pending approval by the applicable permitting authority of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. Each plan must contain the following information:

D.3.8 7 BACT (Best Available Control Technology) Condition [326 IAC 8-1-6]

(a) Pursuant to CP 003-9243-00286 on May 1, 1998, and 326 IAC 8-1-6, the afterburner, determined to be the best available control technology, shall be operated at all times that the Scrap Dryer thermal chip dryer is in operation. When operating, the afterburner must maintain a minimum VOC capture efficiency of ninety-nine percent (99%) and a minimum VOC destruction efficiency of ninety-nine percent (99%). Compliance with this requirement will render the requirements of 326 IAC 2-2 and 40 CFR 52.21 not applicable.

D.3.9 8 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations Particulate Emission Limitations for Manufacturing Processes), the allowable particulate matter (PM) emissions rate from the thermal chip dryer shall not exceed 13.62 pounds per hour when operating at a process weight rate of 6 tons of metal per hour.

D.3.40 9 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its baghouse control devices. If the OM&M plan required by condition D.3.7 6 is developed in accordance with Section B- Preventive Maintenance

Plans, then after the OM&M plan has been approved, it shall satisfy the requirements of this condition.

Compliance Determination Requirements

D.3.10 Equations for Determining Compliance [40 CFR 63.1513]

The owner or operator of a thermal chip dryer must use the equations listed in 40 CFR 63.1513 in order to determine compliance with the applicable emission limits in Condition D.3.3.

D.3.11 Fabric Filter Compliance Requirements [40 CFR 63.1506(c)] Particulate Control

Pursuant to CP-003-9243-00286, issued on May 1, 1998, 40 CFR 63.1506(c), and in order to comply with conditions D.3.1, D.3.3, and D.3.9 **8**, the owner or operator shall operate **a** fabric filter baghouse at all times the respective **thermal chip** dryer is in operation, in accordance with the OM&M plan. The owner or operator must:

- (1) Install, calibrate, maintain, and continuously operate a bag leak detection system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period.
- (2) Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14°C (plus 25°F)

D.3.12 Afterburner Compliance Requirements [40 CFR 63.1506(g f)]

Pursuant to CP-003-9243-00286, issued on May 1, 1998, 40 CFR 63.1506(g f) and in order to comply with condition D.3.8 7, the owner or operator shall operate the afterburner, determined to be the best available control technology (BACT), at all times the respective thermal chip dryer is in operation, in accordance with the OM&M plan. For the afterburner, the owner or operator must:

- (1) Maintain the 3-hour block average operating temperature of each afterburner at or above the average temperature established during the performance test.
- (2) Operate each afterburner in accordance with the OM&M plan.
- (3) Operate the thermal chip dryer using only unpainted aluminum chips as the feedstock.

D.3.13 VOC Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]**[40 CFR 63.1511][40 CFR 63.1512]**

- (a) Within forty-eight (48) months after issuance of this permit Prior to June 24, 2006, the Permittee shall perform VOC testing on the Scrap Dryer thermal chip dryer utilizing methods as approved by the Commissioner to ensure compliance with the destruction efficiency requirement of Condition D.3.8 7 (326 IAC 8-1-6). This test shall be repeatinged at least once every five years from the date of this valid compliance demonstration.
- (b) Prior to September 18, 2005, the Permittee must conduct a performance test to measure D/F and THC emissions at the outlet of the control device while the thermal chip dryer processes only uncoated aluminum chips. This test shall be completed utilizing methods as approved by the Commissioner to ensure compliance with Condition D.3.3 and repeated at least once every two and onehalf (2.5) years from the date of valid compliance demonstration. The Permittee is subject to the testing/compliance requirements and demonstration procedures as described in 40 CFR 63.1511 and 40 CFR 63.1512.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.14 Labeling [40 CFR 63.1510(c)]

The owner or operator shall, for the Scrap Dryer, inspect the labels required in Condition D.3.4 at least once per calendar month to confirm that the posted labels are intact and legible.

D.3.45 14 Capture/Collection System [40 CFR 63.1510(d)(2)]

The owner or operator shall, for the Scrap Dryer thermal chip dryer, inspect each capture/collection and closed vent system associated with the dryer at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in Conditions D.3.6 and D.3.10 40 CFR 63.1506(c) and record the results of each inspection.

D.3.16 **15** Feed/Charge Determination [40 CFR 63.1510(e)]

The owner or operator of the **thermal chip** dryer must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the dryer over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. The accuracy of the weight measurement device or procedure must be ± 1 percent of the weight being measured.

D.3.47 16 Fabric Filter Monitoring Requirements [40 CFR 63.1510(f)]

These requirements apply to the owner or operator of the scrap thermal chip dryer using a fabric filter with a bag leak detection system.

D.3.48 17 Afterburner Monitoring Requirements [40 CFR 63.1510(g)]

The owner or operator of an affected source a thermal chip dryer using an afterburner for control shall:

D.3.19 Fabric Filter Inlet Temperature Monitoring Requirements [40 CFR 63.1510(h)]

- (a) The owner or operator must install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems in 40 CFR Part 63, Subpart A.
 - (b) The temperature monitoring device must meet each of these performance and equipment specifications:
 - (1) The monitoring system must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period.
- (2) The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).
 - (3) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.

D.3.2018 Corrective Action for 40 CFR 63, Subpart RRR [40 CFR 63.1506(p)]

D.3.2119 Parametric Monitoring

(a) The Permittee shall record the total static pressure drop across the baghouses D, used in conjunction with the scrap thermal chip dryer, at least once per shift when the dryer is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response

steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.3.22**20** Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the scrap **thermal chip** dryer when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.3.23 **21** Broken or Failed Bag Detection

In the event that bag failure has been observed.

(b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.24 22 Secondary Aluminum Production Record Keeping Requirements [40 CFR Part 63, Subpart RRR]

Pursuant to 40 CFR Part 63.1517 the owner or operator of a thermal chip dryer shall:

- (d) In addition to the general records required by 40 CFR 63.1510(b), the owner or operator of a scrap thermal chip dryer must maintain records of:
 - (1) The number of total operating hours for the affected source or emission unit during each 6-month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action(s) taken.
 - (2) For each affected source and emission unit with emissions controlled by a limeinjected fabric filter:
 - (i) Records of inspections at least once every 8-hour period verifying that lime is present in the feeder hopper or silo and flowing, including any inspection where blockage is found, with a brief explanation of the cause of the blockage and the corrective action taken, and records of inspections at least once every 4-hour period for the subsequent 3 days. If flow monitors, pressure drop sensors or load cells are used to verify that lime is present in the hopper and flowing, records of all monitor or sensor output including any event where blockage was found, with a brief explanation of the cause of the blockage and the corrective action taken;
 - (ii) If lime feeder setting is monitored, records of daily inspections of feeder setting, including records of any deviation of the feeder setting from the setting used in the performance test, with a brief explanation of the cause of the deviation and the corrective action taken; and

- (iii) If lime addition rate for a noncontinuous lime injection system is monitored pursuant to the approved alternative monitoring requirements in 40 CFR 63.1510(v), records of the time and mass of each lime addition during each operating cycle or time period used in the performance test and calculations of the average lime addition rate (lb/ton of feed/charge).
- (3-2) 15-minute block average afterburner operating temperature, including any period when the average temperature in any 3-hour block period falls below the compliant operating parameter value with a brief explanation of the cause of the excursion and the corrective action taken; and annual afterburner inspections.
- (4) 15-minute block average inlet temperatures for each lime-injected fabric filter, including any period when the 3-hour block average temperature exceeds the compliant operating parameter value +14-°C (+25-°F), with a brief explanation of the cause of the excursion and the corrective action taken
- (5-3) For each continuous monitoring system, records required by 40 CFR 63.10(c).
- (6 4) Feed charge (or throughput) weights for each operating cycle or time period used in the performance test.
- (5) All charge materials.
- (7) Monthly inspections for proper unit labeling subject to labeling requirements.
- (8 6) Annual inspections of emission capture/collection and closed vent systems.
- (9 7) Any approved alternative monitoring or test procedure.
- (10 8) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:
 - (iA) Startup, shutdown, and malfunction plan;
 - (iiB) For major sources, OM&M plan; and
 - (iiiC) Site-specific secondary aluminum processing unit emission plan (if applicable).

D.3.25 23 Record Keeping Requirements

- (a) To document compliance with Condition D.3.21 19, the Permittee shall maintain records of the inlet and outlet total differential static pressure drop once per shift during normal operation when venting to the atmosphere:
- (b) To document compliance with Condition D.3.22 **20**, the Permittee shall maintain records of the results of the inspections required under Condition D.3.22 **20**. and the dates the vents are redirected.

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Conclusion

This proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Permit Modification No. 003-17183-00286.

Appendix A: Secondary Aluminum Production Thermal Chip Dryer

Company Name: Superior Aluminum Alloys, L.L.C

Address City IN Zip: 14214 Edgerton Road, New Haven, Indiana 46774

part 70 permit: 003-17183-00286 Reviewer: ERG/BS Date: 6/13/03

Thermal Chip Dryer Emissions (stack D)

Note: These calculations are from the TSD for T003-11452-00286, issued June 24, 2002.

Emissions Basis (Dryer, Afterburner, Dryer Natural Gas)

Maximum Chip Aluminum Rate: 6 Tons/Hr

12 MMBTU/Hr Maximum Afterburner Heat Input: Dryer Natural Gas Heat Input: 6 MMBTU/Hr Maximum

Stack Flow Rate: 32,000 acfm Baghouse grain loading (gr/dscf) 0.0013 gr/dscf

Afterburner Efficiency: 99.9 % Est. Based on the dryer compliance testing on 1/11/00

Hours of Operation: 8760 Hr/Year

Dryer Emission Factors

PM/PM-10 Emission Factor: 35.9 Lbs/Ton (construction permit emission factor)

SOx Emission Factor: 0.42 Lbs/Ton (Based on the dryer compliance testing on 1/11/2000)

NOx Emission Factor: 0.9 Lbs/Ton (construction permit emission factor)

87 Lbs/Ton (Based on the dryer compliance testing on 1/11/2000) VOC Emission Factor:

Potential Uncontrolled Emissions (Dryer)

Emissions (pounds per hour) = Max. Chip Aluminum Rate x Emission Factor, x 8760 hr/yr / 2000 lb/ton

| PM/PM-10 = | 215.4 Lbs/Hr | = | 943.452 Tons/Yr |
|------------|--------------|---|-----------------|
| SOx = | 2.52 Lbs/Hr | = | 11.0376 Tons/Yr |
| NOx = | 5.4 Lbs/Hr | = | 23.652 Tons/Yr |
| VOC = | 522 Lbs/Hr | = | 2286.36 Tons/Yr |

Potential Controlled Emissions (Dryer)

PM/PM-10 Emissions (pounds per Ibaghouse grain loading (gr/dscf) x volumetric flow rate (acfm) x 1/7000 lb/gr x 60 min/hr

VOC Emissions (pounds per hour) uncontrolled emissions x (1- afterburner efficiency/100)

SO2 Emissions (pounds per hour) :uncontrolled emissions NOx Emissions (pounds per hour) :uncontrolled emissions

PM/PM-10 =0.36 Lbs/Hr 1.56 Tons/Yr SOx = 2.52 Lbs/Hr 11.04 Tons/Yr 5.4 Lbs/Hr 23.65 Tons/Yr NOx = VOC = 0.522 Lbs/Hr 2 29 Tons/Yr

Combustion Emission Factors (for Afterburner and Dryer)

7.6 Lbs/MMFT3 (emission factor from AP 42 , Fifth Ed., Chapter 1.4) PM/PM-10 Emission Factor: 0.6 Lbs/MMFT3 (emission factor from AP 42 , Fifth Ed., Chapter 1.4) SOx Emission Factor: 100 Lbs/MMFT3 (emission factor from AP 42 , Fifth Ed., Chapter 1.4) NOx Emission Factor: 5.5 Lbs/MMFT3 (emission factor from AP 42, Fifth Ed., Chapter 1.4) VOC Emission Factor: 84 Lbs/MMFT3 (emission factor from AP 42 , Fifth Ed., Chapter 1.4) CO Emission Factor:

Heat Content: 1020 MMBTU/MMFT3

Potential Uncontrolled Emissions (Afterburner Natural Gas Combustion)

Emissions (pounds per hour) = Afterburner Heat Input / Heat Content X Émission Factor

| PM/PM-10 = | 0.09 Lbs/Hr | = | 0.39 Tons/Yr |
|------------|-------------|---|--------------|
| SOx = | 0.01 Lbs/Hr | = | 0.03 Tons/Yr |
| NOx = | 1.18 Lbs/Hr | = | 5.15 Tons/Yr |
| VOC = | 0.06 Lbs/Hr | = | 0.28 Tons/Yr |
| CO = | 0.99 Lbs/Hr | = | 4.33 Tons/Yr |

Potential Uncontrolled Emissions (Dryer Natural Gas Combustion)

Emissions (pounds per hour) = Natural Gas Heat Input / Heat Content X Emission Factor

| PM/PM-10 = | 0.04 Lbs/Hr | = | 0.20 Tons/Yr |
|------------|-------------|---|--------------|
| SOx = | 0.00 Lbs/Hr | = | 0.02 Tons/Yr |
| NOx = | 0.59 Lbs/Hr | = | 2.58 Tons/Yr |
| VOC = | 0.03 Lbs/Hr | = | 0.14 Tons/Yr |
| CO = | 0.49 Lbs/Hr | = | 2.16 Tons/Yr |

Total Potential Emissions (after control)

| PM/PM-10 = | 2.15 |
|------------|-------|
| SOx = | 11.08 |
| NOx = | 31.38 |
| VOC = | 2.71 |
| CO = | 6.49 |

Potential To Emit of Modification

Change in allowable emissions (in tons per year) =

For PM: PSD Minor limit (most stringent limit now that NESHAP PM limit has been increased) (tpy) - previous NESHAP limit for scrap dryer

For PM: 16.24 tpy increase

For VOC/HAP: previous NESHAP limit for scrap dryer (lb/ton) - new NESHAP limit for chip dryer (lb/ton)) x capacity (ton/hr) x 8760 hr/yr x 1/2000 ton/lb For VOC:

19.45 tpy increase

1.2E-07 tpy increase (negligible) For HAP: